The Cotton Gin and Oil Mill

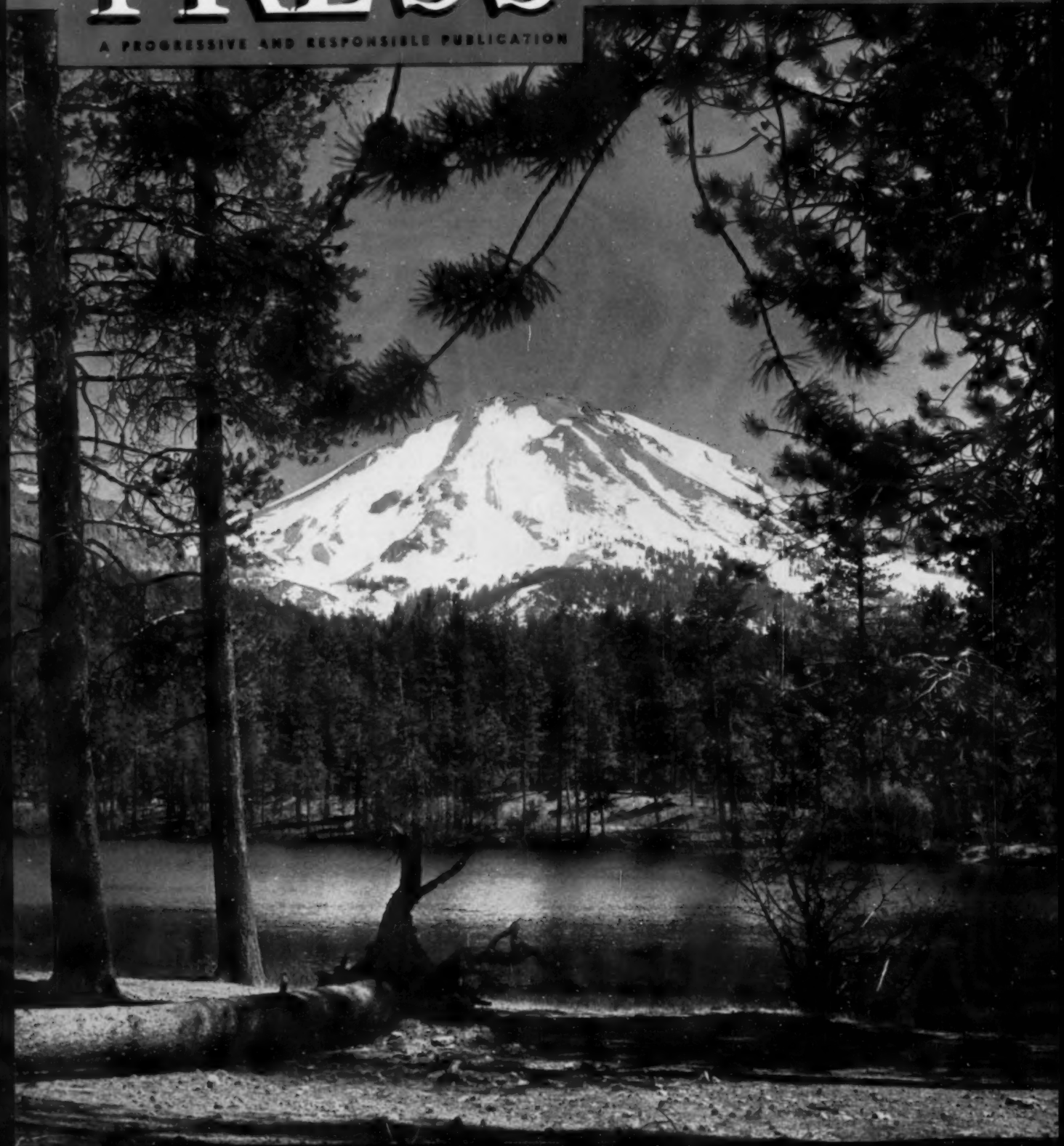
PRESS

NOVEMBER 30, 1937

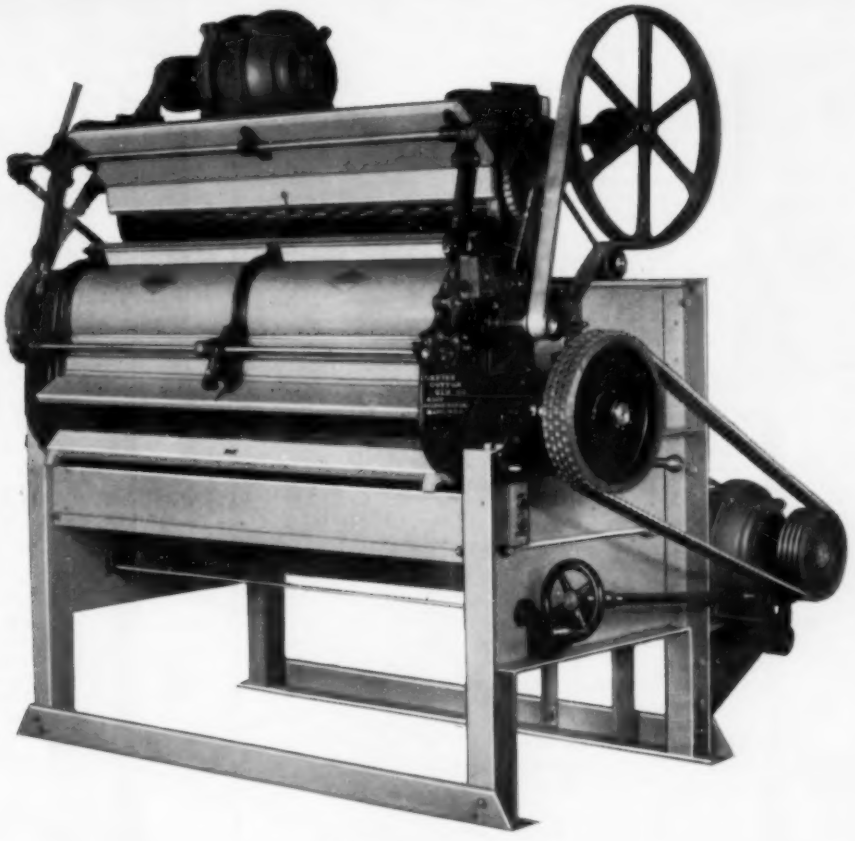
58th Year

THE MAGAZINE OF THE COTTON GINNING AND OILSEED PROCESSING INDUSTRIES

A PROGRESSIVE AND RESPONSIBLE PUBLICATION



Entered as Second-class matter February 4, 1905, at the Post Office at Dallas, Texas, Under Act of Congress of March 3, 1897



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ON OUR COVER:

With the race against time and the elements behind us, and the holiday rush ahead of us, this seems the perfect time to stop and reflect, to take stock, to listen to the stillness, and to enjoy that inner silence that every man needs. Mother Nature provides just such a setting for us, time and time again, as at this beautiful spot in Lassen Volcanic National Park in California, where the majestic Mt. Lassen towers above Reflection Lake.

Photo by A. Devaney, Inc.

VOL. 58 NOV. 30, 1957 NO. 24

The Cotton Gin and Oil Mill PRESS...

READ BY COTTON GINNERS, COTTONSEED CRUSHERS AND OTHER OILSEED PROCESSORS FROM CALIFORNIA TO THE CAROLINAS

★ ★ ★

OFFICIAL MAGAZINE OF:

National Cottonseed Products Association

National Cotton Ginners' Association

Alabama Cotton Ginners' Association

Arizona Ginners' Association

Arkansas-Missouri Ginners' Association

California Cotton Ginners' Association

The Carolinas Ginners' Association

Georgia Cotton Ginners' Association

Louisiana-Mississippi Cotton Ginners' Association

New Mexico Cotton Ginners' Association

Oklahoma Cotton Ginners' Association

Tennessee Cotton Ginners' Association

Texas Cotton Ginners' Association

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THE COTTON GIN AND OIL MILL PRESS *is the Official Magazine of the foregoing associations for official communications and news releases, but the associations are in no way responsible for the editorial expressions or policies contained herein.*

THE COTTON GIN AND OIL MILL PRESS

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WASHINGTON REPRESENTATIVE (EDITORIAL ONLY)

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744 Jackson Place, N.W.
Washington 6, D. C.

Published by

HAUGHTON PUBLISHING COMPANY

RICHARD HAUGHTON
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SUBSCRIPTION RATES:

Domestic: 1 year $3; 2 years $5; 3 years $7. Foreign: Latin-American countries $10; all others $15 per year. (Not accepted for "Iron Curtain" countries.) All subscriptions cash with order.

Published Every Other Saturday

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EXECUTIVE AND EDITORIAL OFFICES:

3116 COMMERCE STREET, DALLAS 26, TEXAS

A PROGRESSIVE AND RESPONSIBLE PUBLICATION

laugh it off

Teacher: "And isn't it wonderful how the little chickens get out of their shells?"

Junior: "What gets me, teacher, is how they got in."

• • •

Upon receiving a complaint about an issue of bread, the Major snapped, "If Napoleon had had that bread in Russia, he would have eaten it with the greatest of pleasure."

"Yes, sir," spoke up the sergeant, "but it was fresh then."

• • •

Two countrymen at a fair approached a stall where little balls bobbed about on top of water spouts. One tried his skill with a rifle, but could not pot the bobbing balls.

"Let's have a shot," said the friend, and taking the rifle, fired. Every ball dropped.

Walking away from the stall, the unsuccessful one said, "That was good! How did you manage to stop all the balls with one shot?"

"Easy," replied the friend. "I took a shot at the man who was working the pump."

• • •

"Do you say prayers before eating?" the minister asked the little boy. "No, sir, I don't need to," replied the child. "My mother's a good cook."

• • •

"Your eyes," thrilled the ardent swain. "They're beautiful. I see dew in them."

"Take it easy, bub," drawled his girl. "That ain't dew. That's don't."

• • •

No need to be too grateful to the scientists for showing us how to get to the moon. After all, they're the ones who have made it necessary for us to evacuate the earth.

• • •

A woman walked into her daughter's home and said hello to the parakeet, who responded with a wolf-whistle.

Pleased at this tribute, she continued to the back of the house and reported what had happened.

Her 5-year-old grandson looked her over thoughtfully and then offered as helpful an explanation as he could muster. "That bird," he confided, "is confused."

• • •

The easiest way to teach children the value of money is to borrow some from them.

• • •

"Let me see that letter you've just opened," snapped the wife. "I can see from the handwriting it is from a woman and you turned pale when you read it."

"You can have it," returned the husband calmly. "It's from your milliner."

• • •

In a beggar's hand, instead of the customary cap, was a top hat. A curious person stepped up to him. "Say," he asked, "isn't it rather odd to be begging with a top hat?"

"Not at all," replied the begger. "If you want to get anywhere on this street you've got to put on some class."

• • •

First old maid: "What kind of time did you have in New York?"

Second old maid: "Eastern standard time."

BOEING 707 JET TRANSPORT, here shown high above the clouds over Mount Rainier, Washington, can be flown to above 42,000 feet and at speeds more than 500 miles per hour.

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RESEARCH AND EXPERIENCE DEVELOPED THE FINE CHARACTER OF ESSO HEXANE

Cotton's Postmark

Delta Station Has Played Big Part In Making Tiny Town Famous.

By WILLIAM L. GILES

THE RUSH to open new lands in the West by-passed the fertile flood plain of the Lower Mississippi River. Broad rivers and dark, mosquito-infested forests of giant trees served as formidable barriers to wagons. Floods were an additional hazard and forced overland travelers to follow routes farther north.

Sons of old plantation families of Virginia, the Carolinas, and Georgia established themselves on the Brown Loam bluffs bordering the Delta on the east. Highly developed plantations were to be found around Natchez and Holly Springs as early as 1830.

Except for limited developments on higher sites along the Mississippi and some of its larger tributaries, the Delta was practically uninhabited until the latter part of the nineteenth Century and the early part of the twentieth Century. Coming of the railroads, demands for high-quality hardwood lumber, local efforts at flood control, and severe erosion in the Brown Loam were factors which stimulated the opening of this fabulous agricultural empire. Delta pioneers were for the most part cotton men seeking new cotton land.

• **Started in 1904** — One summer day in 1904, a group of Delta planters were discussing agricultural problems and came to the conclusion that there was much to be learned about crop production. They decided it was high time an experiment station was established to find some facts about crops, soils, and animal production in the Delta.

The late Alfred H. Stone, a man of unusual vision and blessed with varied talents, was a leader of the group. Through his efforts and the efforts of other progressive landowners, $15,000 was subscribed for the purchase of land.

The Mississippi Legislature was petitioned, and in December, 1904, a bill was passed authorizing the establishment of the Delta Branch of the Mississippi Agricultural Experiment Station. Two hundred acres of land were purchased near the village of Stoneville. Before the year was over, work was under way on what has become one of the leading cotton-research centers of the world.

The name on the tiny post office at Stoneville where mail is received for the Delta Branch Experiment Station, the U.S. Ginning and Fiber Laboratories, and the Stoneville Pedigreed Seed Co. has become synonomous with advances in cotton production and processing around the globe.

History may seem out of place in an article dealing with a modern research center and its program. However, this brief account reflects the interest and progressive spirit of the men who founded the station. This same keen interest and spirit still lives in Delta planters who support and use the station today. A constant stream of visitors and inquiries for information are a vote of confidence appreciated by the research workers.

Additional land purchases have expanded the original 200 acres to more than 1,100 acres of tillable land for row-crop and pasture production research. The U.S. Department of Agriculture owns 200 acres of this land which is operated as an integral part of the station. In addition to the tillable land, the station owns over 2,600 acres of forest devoted to research in hardwood management.

Although the Delta Branch Station is a Mississippi institution, much of the research program is cooperative with USDA. Excellent federal-state cooperation has become a tradition at this location. The same attitude exists between the station and its neighbor, U.S. Ginning and Fiber Laboratories.

• **Advisors Aid Work** — To be most beneficial to the area it serves, an experiment station must design its research program to solve existing problems, yet look to the future. Planning research to accomplish these goals requires the best of brains. Suggestions for needed research usually come form the technical staff, state, regional, and national conferences.

THE AUTHOR is superintendent of the Delta Branch Experiment Station, Stoneville, Miss.

In addition to these usual sources of ideas, the Dalta Station staff looks to the advisory research committee of Delta Council, an annual meeting with Delta county agents, and an annual meeting with Soil Conservation Service technicians.

The Delta Council committee is composed of progressive planters and farm managers. Many of these men have advanced degrees (five of the current members have Ph.D.'s), some have served or are serving on USDA commodity committees, and some have served on Presidential advisory committees dealing with agricultural problems. All have been highly successful in business, and all are interested in progressive agriculture. Any corporation would give its eye-teeth to have the brainpower represented by this group.

County agents and other professional

agricultural workers visit the station throughout the year. In January or early February each year, the station staff meets with Delta county agents and their assistants for one day. A portion of the day is devoted to presenting results of selected experiments for the past season. Another portion of the day is devoted to a discussion of problems encountered by the agents and suggestions for research on those items where no work is in progress. This same procedure is followed with SCS technicians.

Through these meetings, researchers and county agricultural workers have come to know each other better. Research workers have been kept in close contact with problems, and men from the counties have become better acquainted with the research in progress. County workers have a part in planning the research program. When a man helps build something, he is almost certain to retain an interest in it.

Cotton Emphasized

Cotton, being by far the most important crop in the area, naturally receives the most attention in the research program. Every phase of cotton production, from genetics to harvesting, is included. Both fundamental and applied studies are a part of this broad research effort.

The station maintains a collection of Upland cotton varieties, strains, and genetic marker stocks as part of its responsibility in the Regional S-1 Cotton Improvement Project. Approximately one-fifth of the collection is grown each year to maintain viable seed supplies. Cotton breeders and geneticists throughout the U.S. request seed from this germplasm bank. Visitors are attracted by the unusual and, in some cases, beautiful plants in the collection.

For many years the cotton-breeding program has included extensive work with smooth-leaved strains. Studies, in cooperation with the U.S. Ginning Laboratory, have shown that these smooth cottons are easier to clean than the hairy varieties now being grown. This means less ginning is required to obtain high grades.

An advancement in the smooth-leaf work has come with the transfer of the smooth character from a cotton species. Leaf blades, petioles, bracts, and stems of plants homozygous for D_2 Smoothness are entirely free of hairs. This valuable contribution from fundamental cytogenetic studies has been made available to commercial plant breeders.

Doubled haploids, another product of the cytogenetics work, are new tools for the cotton research. These highly uniform strains serve as stocks for introducing desirable properties from cotton species. They also offer the physiologist and geneticist excellent experimental materials.

Properties for bract drop, bract flare, high lint percent, unusual lint strength, and many others have already been transferred to Upland stocks. Here are bright hopes for cotton's future.

Since the first crop was planted on the station, cotton variety tests have had a place. In addition to variety and strains tests on the station, tests are planted at four locations off the station to sample conditions throughout the Delta. Recent changes in practices demand a variety test for mechanization and a test under supplemental irrigation.

Broad, relatively level fields in the Delta are well adapted to the use of mechanized production of most crops. Cotton farmers in the area were quick to see the advantages of the row-crop tractor and later the mechanical harvester. It is natural that the station should have assumed leadership in the development of methods and machines for reducing the hand labor in cotton production.

An attempt has been made to mechanize every step in cotton production. For this reason, the research program attacks a wide variety of problems. Machines for the application of insecticides, herbicides, and defoliants have resulted from this program.

Through cooperation with industry, the flat-type flame cultivator burner was developed and the practical application of this weed-control method demonstrated. Machines for the application of fertilizers and countless devices for field-plot work have come from the brains and the shop of the station engineers.

Results of deep-tillage studies by the mechanization and soils departments have meant millions of dollars in increased crop yields. These experiments are being continued to determine ideal depth, spacing, and frequency for deep tillage. Various implements are also compared.

Methods of land preparation and planting offer excellent possibilities for

(Continued on Page 29)

Ginners Are Cotton's Top Ambassadors

Destiny of cotton is in hands of leaders of the industry, who have demonstrated that they can build strong goodwill programs.

BY LEWIS H. BOHR

GINNER AND STATE REPRESENTATIVE

WATONGA, OKLA.

THE DESTINY OF COTTON lies, to a large degree, within the hands of the hundreds of ginners, crushers, compressmen and other segments of the industry in Oklahoma and the Cotton Belt.

William Jennings Bryan, in a speech delivered in 1899, said: "Destiny is not a matter of chance, it is a matter of choice; it is not a thing to be waited for, it is a thing to be achieved."

This quotation has particular application to the subject matter of this article.

The role of the ginner as an ambassador of goodwill for cotton is an important one, indeed. In fact, because of his close contacts with producers, his role is one which commands top billing.

My good friend, Secretary Edgar McVicker of the Oklahoma Cotton Ginners' Association, has said:

"It is generally recognized throughout the cotton industry in Oklahoma that the local ginner is the key man in getting a cotton crop produced. The ginner has come to be recognized as an important influence on persuading the farmer to plant cotton, he disseminates all kind and types of research information to him with regard to varieties to plant, the kind and quantity of fertilizer to apply, the type of insecticide to be used and rate of application and of course, many of the ginners supply the seed, fertilizer and insecticides."

Naturally, it would be foolish to say that the ginner is the only one interested in the production of cotton. This has been proved untrue in the past by the assistance given cotton ginners by the various segments of the cotton industry here in Oklahoma. Crushers, compresses, warehouses, brokers, gin machinery companies, farm machinery companies, seed and fertilizer companies all lend a financial and advisory helping hand.

• **Local Cotton Promotion** — There are many examples of what has been done in Oklahoma to promote cotton production. I wish it were possible to elaborate on this subject and give credit where credit is due, but space does not permit. I would like to cite a few of what I consider outstanding examples of cotton promotion.

During National Cotton Week, a number of towns in Oklahoma go "all out" in displaying cotton and cotton products. My good friend, Marion Lucas, one of the big chiefs in the Chickasha Cotton Oil Co. tribe, informs me that in Chickasha they have participated in this National Cotton Week program for several years.

Mr. Lucas is an outstanding example of agricultural leadership and is well known in cotton circles as a dedicated promoter of cotton production. The Chickasha affair is a week-long program with all the local gins, crushers and compresses participating, along with merchants, bankers, the Chamber of Commerce and the civic organizations. Compresses furnish cotton bales to put along Main Street and bales of cotton are placed in the bank lobbies for display. Also, a compressed bale is displayed on Main Street and a guessing contest is held on the weight of the bale and the person guessing the weight to the nearest ounce wins a prize donated by the gins, crushers, compresses, etc. Most important of all, the local merchants participate by displaying cotton products and by-products in their display windows with appropriate advertising.

Other cities and towns in Oklahoma participating, in cooperation with the National Cotton Council, in similar promotions include Oklahoma City, Tulsa, Muskogee, Altus and Hobart. Hobart has participated in this program since 1956 and has an outstanding program under the leadership of Cecil Watson, district gin manager of Chickasha Gins and C. O. Johnson, manager of the Cotton Farmers Co-Operative Gin. Both men are due praise for their efforts in promoting cotton production.

At Altus, in Jackson County, an annual banquet is held to honor the winners of the local FFA and 4-H cotton production projects. Mothers' and dads' of winners are invited. The event is sponsored by local ginners, crushers and other interested agricultural leaders. Winners are presented jackets in appreciation of their efforts.

One of the most important programs in our state, which brings together the cotton ginner and crusher with the producer and businessman, is the cotton research work directed by Oklahoma State University. The Oklahoma Cotton Research Foundation aids the cotton program financially by sponsoring research projects and educational programs. 4-H and FFA boys are awarded expense paid trips out-of-state to visit cotton production areas. 4-H Club girls are awarded cash premiums on team demonstrations related to cotton clothing and cotton home furnishings at the State 4-H Club Round-Up. Also, at each of the three state fairs (Oklahoma City, Tulsa and Muskogee) cash awards are available to 4-H girls for exhibits of cotton clothing and cotton home furnishings.

Here in the Blaine County area, the two local Watonga gins—Farmers' Custom Gin, owned and operated by A. E. Goerke and the Farmers' Independent Gin, owned and operated by Sam LaFaver—combine their efforts in various ways to promote cotton production.

Both of these men are ginners of long standing and are considered leaders in ginning circles. Both have been president of the Oklahoma Cotton Ginners' Association and both have held positions on the National Cotton Council. At various times in recent years, local gins have sponsored test plots, field inspection tours and have assisted 4-H and FFA Clubs by furnishing members registered seed for cotton projects. They have also held cotton classing and production schools in which the farmers participated. This is usually held in connection with Oklahoma Extension service. This program stresses the importance of planting approved varieties, proper tillage methods, fertilizer application and, most of all, proper harvesting methods that do not tend to lower cotton grades and turnout. Farmers also are urged to

deliver their cotton to the gins in vehicles that will contain the load without tramping.

In this cotton promotion, we are fortunate in having County Agents who are conscious of the importance of this phase of agriculture. They have given freely of their time and services in support of cotton production.

Again, I wish it were possible to mention all individuals and communities who are rendering a wonderful service to the cotton industry here in Oklahoma. I think that all will agree that a good job is being done here, but there is definitely a need for intensifying this program.

• **Needs in Oklahoma** — In the face of acreage allotments, and now the Soil Bank, we have seen cotton production decline. In the three years, 1940-1941-1942, the U.S. produced 36,127,000 bales of cotton. During the same three years Oklahoma produced 2,228,000 bales, or approximately six and one-half percent of the U.S. production. Approximately 15 years later, during the three years 1954-1955-1956, the U.S. produced 41,727,000 bales of cotton. In these same years, Oklahoma produced 1,017,000 bales, or about two and one-half percent of the U.S. production. In other words, while production in the U.S. has increased some 15 percent, in 15 years, production in Oklahoma has dropped over 50 percent. This is a serious and challenging fact. It is of vital importance and has to be met if the cotton industry is to survive, much less expand, in Oklahoma. How the problem can be met is certainly a subject in itself, as it is a perplexing one of many facets. The greatest measure of relief could come from Congress by enacting a farm program that would base production on bales instead of acres and allow us to produce our fair share of the U.S. production.

This year is Oklahoma's fiftieth birthday. It's easy to see the progress we have made during this time and we should rededicate ourselves, as cotton men, to see that we go just as far in the next 50 years.

Knowing the caliber of our cotton leaders in Oklahoma, I firmly believe this will be done.

• Cotton Plans Made By Texas Group

PLANS to strengthen cotton production in Texas were mapped by leaders Nov. 20 at a meeting in College Station.

Burris C. Jackson, Hillsboro, general chairman, Statewide Cotton Committee of Texas; Eugene Butler, president of The Progressive Farmer; C. B. Spencer, agricultural director, Texas Cottonseed Crushers' Association; and others spoke.

Group Will Promote Cotton in Arkansas

East Arkansas Cotton Promotion Council was organized Nov. 20, at Jonesboro.

Chapters will be organized in each county in the area to promote the use of cotton products.

Amos David, Caraway, was named president, and M. D. Dennis, Caraway, vice-president.

Robert H. Holt, Bay, ginner, was elected second vice-president. Other officers are Donald Jones of Jonesboro, treasurer and Gene Smith of Jonesboro, secretary. Board members include Fred M. Carter of Lake City, Claud Finch of Monette and Paul Hanshaw of Jonesboro.

Ginnings to Nov. 14

Only 6,757,656 bales of cotton had been ginned to Nov. 14 this season, the Bureau of Census reports. This compared with 11,100,179 to the same date last season and 11,421,406 two seasons ago. Figures by states follow:

State	Ginnings (Running bales)—linters not included		
	*1957	1956	1955
United States	**6,757,656	**11,100,179	**11,421,406
Alabama	500,600	708,825	997,019
Arizona	278,784	460,721	299,617
Arkansas	644,577	1,257,047	1,418,063
California	1,066,771	965,646	694,002
Florida	6,664	9,058	14,663
Georgia	375,617	553,959	663,341
Illinois	658	2,055	1,016
Kentucky	2,818	6,757	5,453
Louisiana	260,085	545,020	527,537
Mississippi	802,158	1,508,826	1,792,656
Missouri	117,334	413,674	357,046
New Mexico	115,540	226,211	157,491
North Carolina	217,820	273,895	309,282
Oklahoma	70,963	204,640	343,183
South Carolina	331,488	474,556	538,953
Tennessee	312,457	495,438	471,916
Texas	1,646,869	2,987,382	2,821,850
Virginia	6,513	6,469	8,318

*The 1957 figures include estimates made for cotton gins for which reports were not obtained in time for this report. Figures were collected by mail and reports were not received for all gins at which cotton had been ginned.

**Includes 230,756 bales of the crop of 1957 ginned prior to Aug. 1 counted in the supply for the season 1956-57, compared with 404,845 and 313,958 bales of the crops of 1956 and 1955.

This report includes 23,936 bales of American-Egyptian for 1957, 21,531 for 1956, and 15,412 for 1955.

The statistics for 1957 in this report are subject to revision. The revised total of cotton ginned this season prior to Nov. 1 is 5,596,179 bales.

Consumption, Stocks, Imports, and Exports

Cotton consumed during September, 1957, amounted to 659,651 bales. Cotton on hand in consuming establishments on Sept. 28, 1957, was 1,079,895 bales—in public storage and at compresses, 9,651,766 bales. The number of active consuming cotton spindles for the month was 18,147,000. The total imports for August, 1957, were 7,755 bales and the exports of domestic cotton, excluding linters, were 336,088 bales.

■ **C. B. SPENCER, Texas Cottonseed Crushers' Association, will address the Texas Farm and Ranch Management Institute at the University of Houston, Dec. 6-7.**

Arkansas Co. Panogenizes 12,000 tons of cottonseed

During the past three years, the St. Francis Valley Pedigreed Seed Company of Parkin, Arkansas, has treated an estimated 12,000 tons of cotton seed with liquid Panogen in its modern plant shown above.

"We've found Panogenized seed is unanimously accepted by farmers in both our domestic sales and export trade," reports E. D. McKnight, Jr. "Furthermore, we've had no trouble whatsoever with our Automatic Panogen Treater during all this time."

McKnight believes his company was the first in Arkansas to switch to the Panogen Process exclusively for the treatment of cottonseed.

Cottonseed Advisory Panel Meets

MEMBERS of USDA's Cottonseed Utilization Panel are shown meeting recently at New Orleans with the staff of Southern Utlization Research and Development Division. Seated, left to right, Walter M. Scott, assistant to the administrator for utilization research, USDA; Robert Stokes, Buckeye Cotton Oil Division, Buckeye Cellulose Corp.; John F. Moloney, National Cottonseed Products Association, Memphis; H. D. Fincher, Anderson, Clayton & Co., Houston; C. H. Fisher, director, SURDD; T. H. Hopper, SURDD; Leonard Smith, director of utilization research, National Cotton Council, Washington; A. L. Ward, NCPA, Dallas; Garlon A. Harper, NCPA, Dallas; H. E. Robinson, Swift & Co., Chicago. Standing, from the left, P. A. Williams, Southern Cotton Oil Co., New Orleans; G. E. Goheen, assistant director, SURDD; E. A. Gastrock, SURDD; R. E. Stevenson, office of the Administrator, UR; Aaron M. Altschul, and F. G. Dollear, SURDD.

• Midsouth Mills Aid Cattle Feeding

OIL MILLS in the Mid-South area invested 21 tons of cottonseed meal in the development of a cotton feedlot market for meal and hulls at the Dixie National Fat Cattle Show in Memphis, on Nov. 8. Cottonseed meal donated by oil mills was awarded to winners in the commercial carlot feeding division of the Show, which was established to demonstrate that farm feeding of cattle is profitable in the area.

Sidney Abraham, general manager, reported in 1956 that after the program had been in operation four years the number of cattle being full fed in the Midsouth area had increased from 5,000 to well over 250,000 head. He predicted that this number would reach 500,000 head within a few years.

Continued support of this program by mills indicated their realization of its worth in creating a market for cottonseed products. Assuming that each animal in the feedlot is fed 1.5 pounds of cottonseed meal for 100 days, this increase to 250,000 head caused by the program has provided a local market for more than 18,000 tons of cottonseed meal, annually.

Cotton oil mills which provided cottonseed meal as prizes were: Arkansas—Forrest City Cotton Oil Mill, Forrest City; Osceola Products Co., Osceola; Delta Products Co., Wilson; Mississippi—Planters Oil Mill, Tunica; Crenshaw Oil Co., Crenshaw; Planters Manufacturing Co., Clarksdale; Riverside Oil Mill, Marks; The Buckeye Cellulose Corp., Corinth; Delta Oil Mill, Inc., Jonestown; and Tennessee—Dyersburg Oil Mill, Dyersburg; Independent Oil Mill, Inc., Jackson; Jackson Cotton Oil Mill, Jackson; The Buckeye Cellulose Corp., Memphis; Chickasaw Oil Mill, Inc., Memphis; DeSoto Oil Co., Memphis; Memphis Cotton Oil Mill, Memphis; Perkins Oil Co., Memphis; The Southern Cotton Oil Co., Memphis; Swift & Co. Oil Mill, Memphis; Lake County Oil Mill, Tiptonville; Trenton Cotton Oil Co., Trenton.

C. E. Garner, secretary of the Valley Oilseed Processors' Association, served as a clearing agent in securing and assembling prize certificates for cottonseed meal. Dalton Gandy, NCPA fieldman, presented cottonseed meal awards to winners at the conclusion of the Show.

• 1957 Hayden Trophy Program Starting

THE SEARCH for the nation's outstanding cotton ginner, to receive the annual Horace Hayden Memorial Trophy, is underway, National Cotton Ginners' Association has announced.

Outstanding ginners chosen by each of the participating states receive state awards, and the national winner is selected from among these nominees.

Tom Murray, Atlanta, executive secretary, has announced that nominations for the Hayden award must be in the National Ginners' Association office by Dec. 31.

The award will be presented April 13, 1958, at the National Association meeting in Dallas. Horace Hayden, who served as executive for the Oklahoma and National ginners' groups until his death, was the ginning leader for whom the award is named.

Leo Killion, Ginner, Dies

Leo E. Killion, ginner and landowner at Portageville, Mo., died Nov. 22 in a St. Louis hospital. He was a past president of Missouri Cotton Producers' Association and a member of the Knights of Columbus and Rotary Club, as well as active in many cotton industry organizations.

Texas Crushers To Meet

Texas Cottonseed Crushers' Association will have area meetings Dec. 4 at Driskill Hotel, Austin and Dec. 5 at Ben Milam Hotel, Houston. Both meetings start at 10 a.m.

Seedsmen Will Meet

Mississippi Seed Improvement Association will hold its annual meeting Jan. 8 at Greenwood, and Mississippi Seedsmen's Association will meet Jan. 12-14 at Biloxi

Fire Destroys Gin

Fire destroyed the E. E. Eaton Gin at Burnsville, Ala., recently.

■ **PALMER BROWN, L. P. Brown Co., has been elected a vice-president of the Downtown Association of Memphis.**

Why

Officiating Is My Hobby

By Bruno Schroeder

Bruno (Pun) Schroeder was an end for Texas Aggies in 1938, and the picture shows the Lockhart, Texas, footballer as he looked in his A&M days. Now, he's better known in the cotton industry as the executive officer for Texas Cooperative Ginners' Association and Texas Federation of Cooperatives. His story tells how he keeps close contact with football through his hobby.

DURING ONE OF THOSE football games (thank goodness they are not all like this), I vaguely remember someone shouting, "Kill the referee. You robber. How much is the other team paying you to call them in their favor? Where is your seeing-eye dog? Who is going to lead you back to the home for the blind? Boo-oo on the referee."

I was a party to these accusations—because I was the referee.

Please note that I said that I vaguely heard the threats and taunts. That is true, because an absolute requirement for an athletic official who hopes to keep officiating for any length of time is that he discipline his mind to the extent that remarks like the above are rebuffed like "water sliding off a duck's back." He must train himself to ignore such remarks and maintain a mental condition which gives the public the impression that he didn't even hear the accusations.

Do most officials, under these circumstances, have a desire to challenge their zealous tormentors; to defend their decisions with an explanation of the rules that apply; to explain why they called a certain play the way they did; and perhaps even to challenge the unreasonable tormentor to physical combat? Certainly they do. An official that cannot ignore these personal insults to his integrity and physical abilities is described in the profession as having "rabbit ears."

After the game, the officials were showering, dressing and discussing the events of the game from the officiating standpoint. (Also, we were kidding one another about the criticism we had received relative to our officiating and saying what we really would like to have said and done to those unreasonable fans, who, in most cases due to ignorance of the rules and a perverted desire to win, make cutting and unjustifiable accusations.

A friend of mine came by to say hello. This friend kidded me about being too old to keep pace with the young players and reminded me that I no longer was a spring chicken. I admitted that I had seen 41 years and that the day following a game I had some aching muscles. I told him that I didn't think I was quite ready for the glue factory or the rocking chair and that I thought I had a few active years left. He, then, in a serious vein, asked why I continued to

go through the physical and mental strain of officiating athletic contests and exposing myself to the verbal abuse of poor sports and narrow-minded losers. He reminded me that this officiating was merely a hobby and that the financial fees barely covered my expenses.

To answer my friend's question, it is necessary to present a few brief experiences in my life. As a youngster on a farm near Lockhart, Texas, I had the desire to participate in athletic contests like any healthy, normal boy. As was the case for most children living on farms in those days, I was expected to come home from school immediately after the last class to do the farm chores. As a result, it was impossible for me to participate in the after-school, organized team sports. It was a keen disappointment.

Just prior to my junior year in high school, we moved into town. This made possible one of my fondest hopes, taking part in the extra-curricular sports of football, basketball, track, etc. I was above average size for my age, had average physical ability, had good teammates, and excellent coaches. As a result, we had several winning football seasons which brought to me offers of athletic scholarships from several colleges. I chose Texas A&M College, from which I was graduated. While there, I earned six varsity letters—three in football and three in track.

Without the athletic scholarship, it would have been impossible for me to go to college. Those who went through the Thirties Depression know what the economic situation was like—especially in agriculture.

This background information leads to most of the answer to the question why I referee athletic contests as a hobby. Part of the answer lies in the fact that I love organized, competitive, team sports. At the risk of appearing vain and immodest, I can sincerely say that whatever character I may have, and my attitude and philosophy toward life in general and toward my fellow man were definitely affected and molded by my experiences while participating in athletics. My opinion of what constitutes good sportsmanship, the need for cooperation with teammates, the determination to keep trying no matter how slim the odds for victory seem to be, and to accept victory or defeat in their proper perspective, all were vitally influenced by my participation in team sports. Perhaps the most important lesson that can be learned from team sports is the necessity to put the welfare of the team above self-glory.

The other part of the answer can be attributed to the realization that I would not have been able to attend college without the athletic scholarship. This, of course, is based on the assumption that even a little college education may be better than none.

Now you may ask, what relation, if any, is there between my past participation in athletics, my feeling of obligation to athletics for making it possible for me to attend college, and my present hobby of officiating athletic contests? The answer is of an intangible nature—something always rather difficult to make clear. Perhaps the nearest I can come to explaining it is something like this. This hobby means to me:

1. The feeling and satisfaction of being an integral part of the game, rather than just a spectator. After the players and the coaches, the official is probably the most active participant. As a part of the game, I feel that to some degree I am assisting in making the game possible, and in that manner repaying a part of the debt I feel I owe to organized team athletics and those associated with it.

2. Being a part of the game and in a small way influencing the calibre of sportsmanship exhibited on the field, gives me the spiritual satisfaction that in a way, small as it may be, I am helping teach youths some of the moral and spirtual benefits that can be gotten from the game experiences.

3. Opportunity to have additional contact and visits with many of my friends who are coaches, teachers and school administrators. It also offers the opportunity to make new friends in that field.

4. Continuing a certain amount of physical activity which I might not otherwise do and which, in my opinion, is absolutely necessary for good physical and mental health.

So actually, this hobby provides me with a great deal of mental satisfaction and pleasure; it assists me to have better physical and mental health; and it affords me the opportunity to partially repay the debt and obligation I feel I owe to organized amateur sports.

as viewed from The "PRESS" Box

• More Seed Diseases

SEED-BORNE DISEASES may plague cotton planting seed, adding to troubles caused by poor germination this season. Clemson College points out that anthracnose fungus attacks usually are worse during a rainy fall. Treatment of seed for planting is essential next season, authorities say.

• Woman of Distinction

AUTHORS who contribute to The Press usually are outstanding authorities on the subjects they discuss, and are readily recognized by readers as "Men of Distinction."

Women contribute less often to The Press; Dorothy Nickerson, whose article appears in this issue, deserves the title, "Woman of Distinction," and special mention. A Bostonian, she is recognized throughout the world as an authority on color. She is a special trustee of the Munsell Color Foundation; holder of the USDA Superior Service Award; a Fellow of the Illuminating Engineering Society; one of three 1957 representatives of the Optical Society of America to the International Commission on Illumination; and has received much other professional recognition.

Her work with cotton at USDA since 1927 has greatly influenced cotton standards and marketing, and will have increasing influence in the future. Most large classing rooms now are lighted according to specifications she helped to develop. With R. S. Hunter and M. G. Powell, she was responsible for developing the Nickerson-Hunter Colorimeter, now used by cotton merchants and mills, as well as by USDA. This incomplete sketch suggests why she lends special distinction to any publication for which she writes as she has done in this issue.

• The French and Soap

THE AVERAGE Frenchman uses less soap in a year than any of his European neighbors and less than one-third as much as an American, official statistics show. According to the figures, a Frenchman buys a bit less than 15 ounces of soap each year while the average American—termed "the cleanest man in the world"—used about three and a quarter pounds. Sounds like this is a wide-open market for vegetable oils!

• Man Wants To Wag

TAILS VANISHED from the human race millions of years ago, but man still wants to wag. This, says a neurosurgeon, is a cause of some of his nervousness. Dr. Mason Trupp, Tampa, said, "even though evolution has deprived man of his tail he has not lost the desire for wagging it." The doctor has developed an operation, which he thinks may reduce headaches and other nerve troubles, in which the filium terminale (the nerve that once was a tail) is released from the spinal cord.

• Cotton Club Formed

TOP COTTON MEN in Tillman County are invited to join one of Oklahoma's exclusive clubs—Tillman County Cotton Producers' Club. One bale per acre on dryland or two bales per acre under irrigation are the qualifications.

• Drinkers Lay More Eggs

WINE-DRINKING HENS lay more eggs than sober ones, German scientists claim. Bavarian Farming Institute tested 60 hens. Those given light wine instead of water laid twice as many eggs as the teetotalers.

• Farm Weather News

A MONTANA weatherman proposes that at least four agricultural "climatology centers" be erected across the nation to provide rural farmers with special weather and water information needed to improve production. Another weather expert explains that there is a need to take temperature and wind readings close to the ground so that farmers can know what kind of moisture, wind and temperature will surround their plants. Both men are in agreement that climatology "is the last big area of research related to agriculture in which we are not now researching self-consciously."

At Memphis, Dec. 12-13

Leaders To Discuss Cotton Production

■ **BELTWIDE meeting will bring together research, educational and production authorities.**

Irrigation, insect control, plant breeding and varied other practices in efficient cotton production will be discussed on the program at the 1957 Beltwide Production Conference.

Sponsored by the National Cotton Council and cooperating organizations, the Conference will be held at the Peabody Hotel in Memphis. Attendance will be 800 or more.

The Cotton Gin and Oil Mill Press on Dec. 28 will publish the information presented at the Conference, and this material will be reprinted and distributed by the Council.

Four technical meetings will be held immediately preceding, and in conjunction with the Production Conference. They are on cotton defoliation, disease control, cotton improvement, and insect control. Attendance at the latter will be limited primarily to research and Extension entomologists of Cotton Belt land-grant colleges and USDA.

J. D. Hays, vice-president, Alabama Farm Bureau Federation, is general chairman for the Conference, and will make the opening statement at the first session, 9 a.m., Thursday, Dec. 12.

M. EARL HEARD

VERNON P. MOORE

TWO OF MANY LEADERS who will take part in the 1957 Beltwide Cotton Production Conference, Dec. 12-13 at Memphis, are shown here. M. Earl Heard is vice-president, in charge of research, West Point Manufacturing Co., Shawmut, Ala. Vernon P. Moore is with the Production and Marketing Division of the National Cotton Council, which sponsors the Conference, in cooperation with other groups.

Speakers at this session who will discuss general subjects related to production problems are Dr. H. Brooks James, North Carolina State College, Raleigh; M. Earl Heard, West Point Manufacturing Co., Shawmut, Ala.; and Dr. R. D. Lewis, Texas A&M College, College Station, Texas.

Following a recess, Dr. Charles F. Lewis, Texas Experiment Station, College Station, will discuss new genetic and breeding techniques; and Dr. Marion W. Parker, USDA, Beltsville, Md,. will present a paper on basic physiological research.

Speakers who will discuss cotton diseases at the afternoon session are Dr. John T. Presley, USDA, Beltsville, Md.; Dr. Luther S. Bird, Texas Experiment Station, College Station; and Harlan E. Smith, Texas Extension Service.

Fertilizing cotton will be the topic for Walter C. Hulburt, USDA, Beltsville, Md.

Dr. Ralph L. Wehunt, Georgia Extension Service, Athens, also will discuss cotton fertilization.

Effect of Current Practices on Cotton's Spinning Performance will be the subject discussed by Vernon P. Moore of the National Cotton Council.

• **Final Day** — Two irrigation subjects are scheduled to open the second morning's session. Speakers will be Dr. William A. Raney, USDA, Beltsville, Md.; and Dr. Grady B. Crowe, USDA-Delta Branch Station, Stoneville, Miss.

Dr. J. C. Gaines, Texas A&M College, College Station, will outline changes in recommended insecticides for cotton. Dr. H. G. Johnston, National Cotton Council; and C. F. Rainwater, USDA, Beltsville, Md., also will discuss insect control.

Agricultural chemicals will be the subject of an address by J. V. Vernon, president, Niagara Chemicals Division, Food Machinery and Chemical Corp., Middleport, N.Y.

Weed control topics are scheduled for discussion by Dr. Walter K. Porter, Louisiana Experiment Station, Baton Rouge; and Robert Wilson, a cotton grower from Arlington, Tenn.

J. B. Dick, USDA-Delta Branch Station, Stoneville, Miss., will talk on skip-row planting in the rainy part of the Cotton Belt; and James Hand, Jr., Rolling Fork, Miss., will describe his successful cotton production program.

Committees Hear Provost

Ray Provost, vice-president, Producers Cotton Oil Co., Fresno, addressed the trade and agriculture committees of San Francisco Chamber of Commerce Nov. 19. He reviewed the development of California's cotton industry.

California Maid of Cotton Janice Brown, also of Fresno, shared honors with Provost at the luncheon meeting.

■ **HARRY S. BAKER, Fresno, president of Producers' Cotton Oil Co., has been elected a director of Bank of America.**

DeLisle-Pikey install popular Panogen Process

DeLisle-Pikey Gin & Delinting Co., of Conran, Missouri, studied reports from agricultural colleges in all cotton producing states, then installed the automatic Panogen seed treater shown above.

"From now on, all seed treated in our plant will be Panogenized," says Chas. Pikey, Jr. "Our customers receive excellent results from Panogenized seed and also like the pink coloring."

Ginners Can Escape Penalty on Tax

Ginners who owe the federal transportation tax will not have to pay penalty and interest, provided that they voluntarily file the necessary return and pay any back tax from July, 1954, to the present. This is the latest information from the Internal Revenue Service, reported in Texas Cotton Ginners' Association Newsletter No. 70.

Edward H. Bush, executive vice-president, Dallas, outlines in this letter, which may be obtained from his office, detailed information as to filing returns, etc. (Texas Association Newsletter 68, as reported Nov. 2 in The Press, outlined the obligations of ginners as to this federal tax).

New Bulletin

RAPID TESTING OF OILSEEDS DESCRIBED IN PUBLICATION

USDA Technical Bulletin 1171 is titled "Rapid Testing of Oilseeds for Oil Quantity and Iodine Number of Oil." Single copies may be obtained free from Office of Information, USDA, Washington 25.

Two rapid-testing methods for testing soybeans, flaxseed, sunflower seed and safflower seed are described.

Midsouth Areas Ask Relief

Mississippi House of Representatives has asked that the state be declared a disaster area for federal loans. The state faces its worst crop condition in 25 years, the resolution said. Delta Council and other organizations also have urged federal action.

New Fiber for Paper Made From Linters

A new fiber, especially designed for fine papers of high strength, is being made from cotton linters by Virginia Cellulos Department, Hercules Powder Co. HVX-20 is the name.

The fiber derived from linters has been used in bond writing papers, onion skin, ledger, weddings, index paper, blueprint and technical papers.

■ **EWELL IRBY BOALES, cottonseed buyer for Buckeye at Memphis until he retired in 1951, died recently after a long illness. He was 77.**

Oil Mill Provides Civic Center

CENTER OF CIVIC ACTIVITIES at Hamlin, Texas, is the directors' room at the Midwest Cooperative Oil Mill, shown here. The mill's personnel serve meals. Lions and Rotarians meet weekly, as does a local athletic booster club; a home demonstration club uses the room each month; and churches and other civic groups regularly use the room. R. L. McClung, manager, comments that service clubs requested the privilege of using the room and "we were vitally interested in the goodwill which our mill needed in the community and agreed to the idea. We are proud that it has been used so widely by our fellow townspeople. We know that we have their valuable goodwill from its availability."

Textile Engineers Will Meet at Raleigh

"Cost Control Through Engineering" will be the theme of the American Society of Mechanical Engineers-Textile Engineering Conference to be held for the first time at North Carolina State College, Raleigh, March 20-21, 1958.

Information is available from E. Lee Harrisberger, department of mechanical engineering, North Carolina State College, Raleigh.

Color Measurements Routine In Grade Standards For Cotton and Linters

by

DOROTHY NICKERSON

Color Technologist, Color Division, USDA

COLOR MEASUREMENTS of cotton are helping the fiber meet competition. Accurate determination of color helps buyers and sellers to be more exact in deciding whether cotton meets specific needs.

Since 1927, work has been done on color measurement in connection with preparation, maintenance, and improvement of cotton grade standards. Until 1950 this was done by technical workers in a laboratory. In 1950 an automatic electronic instrument was developed that can be used out in an open classing room, where any classer who has the desire to check his grade classification against the instrument may do so at will.

This instrument is the Nickerson-Hunter Cotton Colorimeter made by the Gardner Laboratories, Bethesda, Md. It is pictured here in its use in preparation of grade standards both for cotton and for cotton linters. In standard preparation use of the instrument is now routine; in fact, in the cotton laboratory shown the five women operators alternate with each other so that each takes a day in turn at the instrument.

The picture of the instrument shows both the window on which the sample is placed for measurement and a grade standards diagram under which moving bars indicate the degree of lightness (on a scale of dark-to-light) and of yellowness (degree of yellowness as it increases from gray or near-white cotton color out to the deeper yellow color in the yellow stained cottons).

On the instrument, the lightness scale is indicated in a vertical direction, and the yellowness scale in a horizontal direction—the position at which the bars cross each other, when they come to rest, indicates the color measurement of any given sample. A diagram of the color of the grade standards for American Upland cotton appears on a translucent sheet, and usually the color of a cotton sample is read directly in terms of the color of the corresponding grade standards. For some purposes the result may be read in terms of numerical scale of lightness (R/d), and yellowness (+b), but for most uses the color is read directly in terms of the corresponding grade.

Diagrams on most of the more than 50 instruments now in use are in terms of the standards revised and adopted in 1953 for grade of American Upland cotton. Special diagrams are necessary for grades of American-Egyptian cotton, and grades of cotton linters.

The box sitting on top of the instrument, contains color standards of porcelain enamel and tile that are very important for any accurate use of the instrument, for it is through measurement of these standards that an operator knows when the instrument is operating correctly.

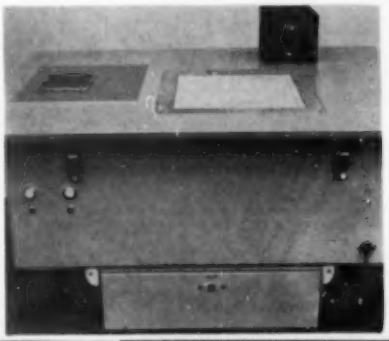
Each instrument is checked, by means of these standards, in terms of a master-instrument in the color laboratory of the Cotton Division, Agricultural Marketing Service of the U.S. Department of Agriculture—the instrument on which the original grade diagram was developed for the color of the standards.

• **Improves Standards** — With such an instrument, color surveys can be made periodically of the U.S. cotton crop, the stability of color in storage can be studied, and standards can be maintained on a more uniform and consistent basis than ever before.

For example, as most cotton men know, cotton is generally high grade in the early part of the season. At that time, it is light, or bright in color, and if promptly harvested, carries very little leaf or foreign matter. But cotton left open in the field, exposed to the weather, becomes progressively darker and duller

(Continued on Page 25)

BELOW, Nickerson-Hunter Cotton Colorimeter for preparing cotton grade standards, showing window on which sample is placed for measurement and the grade diagram against which moving cross bars automatically indicate color in relation to cotton grade standards color. Black box contains porcelain enamel and tile standards for calibrating.



BELOW, LEFT. This photograph shows the use of Nickerson-Hunter Cotton Colorimeter in the classification of cotton linters, Cotton Linters Classing Laboratory, Washington, D.C.

BELOW, RIGHT. This shows the preliminary preparation of cotton standards, Preliminary Room, Washington. Operator in foreground is using Colorimeter under lighting provided by Cotton Examolites.

In California-Arizona

Committee Seeking Oilseeds for West

■ INDUSTRY MEMBERS sponsor research and plantings to find more raw material.

By JOSEPH R. SMITH
Chairman, West Coast Oilseeds Development Committee

In 1952, alarmed at the effects of agricultural legislation upon the production of oilseeds in the West, members of several interested companies met informally and decided to form the West Coast Flaxseed Development Committee.

Purpose of this group was to supply information on oilseed crops which might be helpful in promoting the growth of oilseeds in the West Coast area.

Original member companies were: Archer-Daniels-Midland Co., California Central Fiber Corp., California Cotton Oil Corp., The Glidden Co., Liberty Vegetable Oil Co., Pacific Vegetable Oil Corp., Southwest Flexseed Association, and Spencer Kellogg and Sons, Inc.

Almost from the start, the Committee's aims were to encourage the production of oilseeds other than cotton; initially because cotton appeared to be well on its way to crowding out interest in other oilseeds, and later to promote oilseeds that could grow on lands diverted from cotton by governmental controls. As the Committee's scope broadened, it became necessary to change the name to the West Coast Oilseeds Development Committee.

As examples, the Committee has sponsored the production of Lee variety soybean planting seed when it was first released in order that sufficient supplies would be available to California and Arizona growers.

Direct contributions were made to both the USDA Southwest Irrigation Station at Brawley, Calif. and the University of California at Davis to provide necessary funds for soybean research.

A number of news letters and bulletins on various timely subjects relative to the oilseed field have been issued over the past years, the most recent being a bulletin on Flax Production Results in the Imperial Valley. The information was derived from a production contest which the Committee helped to sponsor. The Committee has been active in providing recommendations on production, marketing and utilization work to both federal and state agricultural authorities.

Present committee members are: Baker Castor Oil Co., California Central Fiber Corp., California Cotton Oil Corp., Liberty Vegetable Oil Co., Pacific Vegetable Oil Corp., Producers Cotton Oil Co. of Imperial Valley, Southwest Flaxseed Association, Spencer Kellogg and Sons, Inc., Vegetable Oil Products Co.

In addition, two other California companies are considering membership at this time. We are interested in expanding the membership to as representative a group as possible and would welcome additional members.

At present, production of flax, safflower and castor beans appears to be on the increase in the West; research on soybeans is being continued by both federal and state people in California.

Estimated acreages for these crops in 1957 were reported as follows:

	Arizona (Acres)	California
Flax	3,000	24,600
Safflower	0	75,000
Castor Beans	4,800	5,100
Soybeans	700	250
Sesame	0	200

Oilseeds Brightest Spot in Future

Oilseeds are the "brightest spot" in the crop picture in California, Extension Economist Kenneth R. Farrell recently told California Farm Bureau members. He listed safflower and castor beans among promising crops "which can be produced efficiently in California and face no oversupply problem." The accompanying article, by a leader in the oilseed industry, tells what oilseed processors are doing to encourage production of more raw material for their plants in the Far West.

from our Washington Bureau

by FRED BAILEY

WASHINGTON REPRESENTATIVE

The COTTON GIN and OIL MILL PRESS

• **More Cotton and Oil Sales** — A new wave of export sales of cotton and cottonseed oil may be in the offing if USDA has its 'druthers on a stepped-up Public Law 480 program. A bi-partisan move to expand sales under the program by at least 50 percent has already been launched.

On the Republican side, it is promoted by USDA officials and by influential GOP members on the Hill.

On the Democratic side, by Minnesota Senator Hubert Humphrey. For nearly a year, he has conducted a comprehensive study of the pros and cons of the billion-dollar-a-year-sales-for-foreign-currency program.

In a meant-to-be-kept-secret estimate of fiscal 1959 money needs, Benson is reported to have told Budget Bureau officials that $2 billion could profitably be spent on PL 480. Since then, it has been whittled by $500 million. But USDA hopes to hold the line against further Budget Bureau chopping.

Humphrey will press for the full $2 billion when the PL 480 appropriation is brought up for Congressional action . . . regardless of the Administration request made in Ike's message.

Benson and Humphrey—usually contestants on legislative matters—are agreed that current spending of $1 billion isn't enough. The study just completed by the Senate Agricultural Committee members reveals that for each buyer of U.S. surpluses, at least one potential buyer is turned down because of insufficient funds. Men who accompanied Benson on his around-the-world selling tour say this is probably right.

The USDA Secretary and the Senator differ only as to the long-term role of PL 480. Benson insists that the program should be regarded as temporary. Humphrey is plugging to make it permanent . . . like ICA and other "foreign aid" programs.

Both cotton and cottonseed oil stand to benefit substantially if the move to hike PL 480 spending is successful . . . particularly the latter. USDA fats and oils specialists report strong demand for U.S. oils among countries unable to pay in dollars.

• **Forecasts Not Alarming** — There was nothing startling in the conclusions of USDA's Annual Farm Outlook Conference. Economists agree that the economy will be taking a breather during the coming twelve months, and that agriculture can look forward to another bleak year.

There was no official announcement made, but a majority of southern-state economists here for the Outlook Conference warn to expect a big increase in cotton production next year. They are assuming, of course, about normal weather. Many look for a repetition of the 13,200,000-bale 1956 crop.

Almost all were unanimous as to the reason: Less acreage reserve participation.

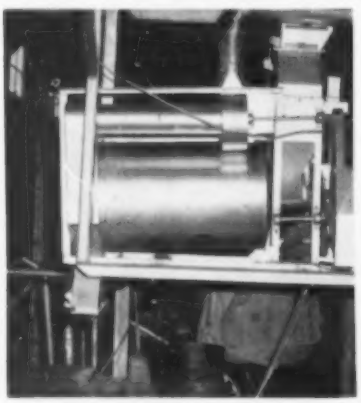
• **USDA to Take Cut** — There are to be some substantial cuts made in USDA's 1959 budget. But they will have little—if anything—to do with Ike's recent dictum of "painful" reductions in non-defense spending.

USDA figures to save roughly $250 million on Soil Bank and about that much on export subsidies during fiscal 1959— compared with this year. Both of these savings "just happen"— rather than being the result of efforts by USDA to trim expenses.

The ceiling on Soil Bank payments was set by the last session of Congress at $500 million, whereas current spending is figured to reach $763 million.

The savings on export subsidies are based on an assumption of a lower volume of exports. Since losses on price support operations are not charged against the USDA budget until commodities are sold, the smaller the volume of sales the smaller the losses.

Some items in the USDA budget are regarded as "untouchable." Included in this list are: Funds to promote export sales, conservation (except for some direct conservation practice payments to farmers), and research. There is almost no chance of a cut in research programs aimed at finding new and improved uses for cotton and other crops in surplus supply.



Leland Delinting Co. says Panogen covers seed best

Leland Delinting Company, Leland, Mississippi, had been in the cotton seed processing business almost 20 years when it installed the Panogen Cottonseed Treater shown above.

"The automatic Panogen Treater is the most trouble-free treating machine and gives best coverage of cotton seed," reports J. A. Collier, president. "Experience on our own 1,500 acre plantation agrees with Experiment Station findings that the better the coverage, the better the results in the field."

ACCO Honors Drivers at Sherman

TWENTY-SIX TRUCK DRIVERS of the Sherman, Texas, plant of Anderson, Clayton & Co. Foods Division were honored recently for an aggregate of 200 years of driving without an accident. Individual safety records range from two to 13 years with ACCO. Drivers received $1,000 in cash awards.

Drivers and company officials in the picture are: Front row: H. V. Rector, J. D. James, L. M. Wright, assistant plant manager, George A. Head, plant manager, R. M. Chambless, transportation foreman, W. A. Jacobs, from Houston Office, W. W. Irby, assistant transportation foreman, C. T. Burton, J. M. Hall; Second row: E. L. Allen, R. E. Phillips, O. L. Wells, W. L. Klas, D. F. Gant, Fred Stephens, L. C. Griffin, Jr., Jack Boaz, R. B. McIntire, J. C. Henley, chief mechanic; Back row: L. E. Davidson, Storer Coulsey, D. R. Casteel, E. L. Gowin, A. L. Brown, J. W. Phillips, J. F. Twyford, C. B. Puckett, W. L. Snowden, G. W. Dunn, W. E. McClendon, E. L. Reynolds. Driver Ralph White was absent.

November Weather Bad Except in Far West

November ended with a record as one of the worst months in the memory of the industry, as far as the weather's influence on cotton is concerned. Rain, snow, freezes and virtually everything else that could hamper harvesting and ginning reduced total crop prospects, quality and the progress of harvesting and ginning. (See ginning report elsewhere in this issue of The Press). As a result, the trade expects the December cotton report to continue the reduction in the indicated crop that has been underway most of the season.

The big exception to these general conditions in the Belt is in California. There, harvesting and ginning have made good progress and the quality of the crop has brought a good demand from buyers. California has ginned almost all of the state's indicated 1,500,000 bales.

• W. W. Ballard Joins Empire Seed Co.

WILFRED WICKES BALLARD, longtime leader in cotton breeding research, is retiring from USDA at Georgia Experiment Station and joining Empire Pedigreed Seed Co., Haralson, Ga.

Ballard joined USDA in 1916 as a student assistant. After serving in the Navy in World War I, he was at USDA stations at Greenville, Clarksville and San Antonio, Texas, working with cotton varieties. Among strains developed were Acala cottons that formed the basis for varieties upon which the California-Arizona cotton industry was founded.

From 1924 to 1935, Ballard was engaged in breeding work with Sea Island cottons in the Southeast. He originated a strain widely grown there for some years and still grown in the West Indies.

Assigned to the Georgia Experiment Station at Experiment in 1935, Ballard, with his associates, developed Empire cotton, first introduced in 1942. To meet the need for a continuing commercial supply of seed, a seed multiplication program was established at Haralson in 1944 under leadership of W. J. Estes.

As demand for Empire seed increased, the original program at Haralson was expanded under the supervision and guidance of Ballard and S. V. Stacy, head of the department of agronomy at the Georgia Experiment Station. The seed program eventually included four one-variety gin communities with about 800 farmer members. This group of farmers was organized as the Empire Seed Producers' Association, with the Empire Pedigreed Seed Co. serving as the sales organization.

Ballard and his co-workers developed strains of Empire which were highly resistant to fusarium wilt and which retained the desirable qualities of the parent variety. The wilt resistant strain of Empire was released in 1949 for commercial production and has been grown exclusively since then by the Empire Seed Producers' Association.

Ballard received USDA's Superior Service Award in May, 1951. The award was given "For research culminating in the production of a superior cotton and for devising new techniques in cotton breeding."

W. W. BALLARD

■ **BILL FOREMAN, Memphis, National Cotton Council public relations manager, has been elected a district director-at-large of the Public Relations Society of America.**

Spindle Moistening Agents

Varied Effects on Quality of Cotton Harvested Mechanically Shown by Research

By

J. R. TAVERNETTI,

C. G. LEONARD,

L. M. CARTER [1]

EXPANDING use of mechanical cotton pickers during the past 10 years has brought several problems. In general, grades have been lower than hand-picked cotton because of more trash, green leaf stain, spindle twist, excess moisture, and oil or grease. Cotton mills, in their interest in obtaining higher-quality cotton, raised the question, "Could any of the difficulties in spinning and dyeing of mechanically harvested cotton be due to type or improper use of spindle moistening agents?"

Test Procedure

In 1955 and 1956, U.S. Department of Agriculture, in cooperation with the Agricultural Engineering Department of the University of California, made a study of the effects of type and amount of spindle moistening agents on the ultimate quality of cotton yarn. The study was divided so that analysis of cotton harvester performance was done at the U.S. Cotton Field Station, Shafter, Calif., and the analysis of the fiber, spinning, and finishing test results were done at the Soutwestern Cotton Ginning Research Laboratory, Mesilla Park, N.M. The fiber, spinning, and finishing tests were performed by the U.S. Agricultural Marketing Service Laboratories at Mesilla Park and Clemson, S.C.

Cotton used for the studies was Acala 4-42 grown in Kern County, Calif. It was grown on beds and had been furrow-irrigated during the season. In 1955 the cotton was uniform in height (3 to 4.5 feet) and standing upright. The yield was about 2.3 bales per acre. It was about 70 percent defoliated and was free of weeds.

In 1956 the cotton was variable ranging from three to six feet in height with some rank lodged portions. Defoliation varied from 50 percent to 90 percent with considerable green bolls and leaves. Yield was about two bales per acre.

The harvesting both years was done in October when the weather was clear, calm, and relatively dry. Temperatures varied from a minimum of 55 degrees F. in the mornings to a maximum of 80 degrees F. in the afternoon. The relative humidity varied from 60 percent down to 30 percent.

A relatively new single-row, barbed-spindle cotton picker was used for the study. It was operated at two miles per hour by an experienced driver. The

Table 2. Effect of Spindle Moistening Agents on Cotton Quality, 1956.

Spindle Moistener		Textile oil/bale		Plain water/bale		Water plus W.A./bale [1]	
		2 pints	6 pints	2 gals.	8 gals.	2 gals.	8 gals.
Picker eff. %		80.9	82.4	85.2	83.1	84.1	84.1
Seed cotton	Plant	7.4	7.1	7.8	8.3	7.8	9.7
Moisture %	Trailer	8.6	8.8	8.9	10.3	9.7	11.5
Trash %	Seed cotton	7.2	7.5	7.0	6.6	8.0	6.4
	Lint	3.1	3.2	2.8	3.2	3.3	3.3
Grade	Lint trash	M	M	SM	M	M	M
Grade index	Composite	96.0	96.0	99.0	94.0	96.0	94.0
Spinning and finishing test results:							
Mfg. waste, picker & card, %		8.08	7.89	8.34	8.00	8.25	8.35
*Neps in card web, No. per 100 sq. in.		15.5	12.0	8.5	9.0	8.5	10.0
*Yarn strength, carded 22's, lbs.		139.2	136.2	138.4	138.7	139.8	140.0
*Yarn strength, carded 50's, lbs.		49.3	48.4	49.0	49.6	49.8	49.6
*Average break factor, carded 22's & 50's yarns [2]		2763	2710	2748	2766	2784	2774
*Average yarn appearance, carded 22's & 50's, index [3]		92.5	95.0	97.5	100.0	100.0	95.0
Yarn strength, mercerized carded 50's yarn, lbs.		50.2	50.4	50.1	50.7	51.0	51.2
Break factor, mercerized carded 50's yarn [2]		2512	2522	2505	2538	2550	2562
Color [4], grey 22 yarn—*Rd		70.2	69.4	71.3	71.1	71.4	69.7
+b		10.9	10.9	11.1	11.0	11.4	10.9
Color, blue dyed 22 yarn—*Rd		24.7	24.2	24.8	24.9	24.9	24.1
—b		20.6	20.7	20.8	20.6	20.6	20.6

[1] One-half pint wetting agent to 30 gallons water.
[2] Break factor is based on yarn skein strength (yarn number x yarn strength).
[3] Index of average quality equals 100.
[4] Color measured in terms of Rd and b scales of the Gardner Automatic Color-Difference Meter. Rd values indicate percent reflectance from 0 to 100; +b values indicate degree of yellowness; and —b values indicate degree of blueness.
*Statistically significant differences at the 95 percent confidence level due to treatment effects.

Table 1. Effect of Spindle Moistening Agents on Cotton Quality, 1955.

Spindle Moistener		Textile oil per bale			Water per bale [1]		
		1 pint	3 pints	7 pints	2 gals.	4 gals.	8 gals.
Picker eff. %		88.5	89.9	91.5	92.6	92.4	92.9
Seed cotton	Plant	5.7	6.8	6.5	6.2	6.2	5.7
Moisture %	Trailer	7.8	9.5	8.6	8.1	9.1	8.6
Trash %	Seed cotton	10.0	10.3	9.4	9.9	11.2	9.0
	Lint	3.6	4.0	4.3	4.3	3.4	3.9
Grade	Lint trash	M	SLM+	SLM	SLM	M	SLM+
Grade index	Composite	100.2	100.0	100.2	100.8	101.0	100.2
Spinning and finishing test results:							
Mfg. waste, picker & card, %		8.61	8.03	8.33	8.77	[2]	8.52
Neps in card web, No. per 100 sq. in.		17.5	13.0	19.0	15.5	—	12.5
Yarn strength, carded 22's, lbs.		130.6	138.6	136.2	139.3	—	138.6
Yarn strength, carded 50's, lbs.		50.0	50.3	48.8	49.5	—	50.4
Average break factor, carded 22's & 50's yarns [3]		2788	2782	2718	2770	—	2784
Average yarn appearance, carded 22's & 50's index [4]		100	98	98	98	—	95
Yarn strength, mercerized carded 50's yarn, lbs.		51.6	52.6	50.8	51.4	—	51.3
Break factor, mercerized carded 50's yarn [3]		2582	2630	2540	2570	—	2565
Color [5], grey 22 yarn—Rd		72.5	72.6	71.6	73.4	—	72.5
+b		10.5	10.9	10.7	10.6	—	10.7
Color, blue dyed 22 yarn—Rd		24.8	24.1	24.0	25.5	—	24.6
—b		21.6	21.6	21.8	22.1	—	21.6

[1] One-half pint wetting agent to 30 gallons water.
[2] Samples from this treatment not tested.
[3] Break factor is based on yarn skein strength (yarn number x yarn strength).
[4] Index of average quality equals 100.
[5] Color measured in terms of Rd and b scales of the Gardner Automatic Color-Difference Meter. Rd values indicate percent reflectance from 0 to 100; +b values indicate degree of yellowness; and —b values indicate degree of blueness.

[1] Respectively, Agricultural Engineer, University of California, Davis; Physicist, Agricultural Engineering Research Division, ARS, USDA, USDA Cotton Ginning Branch Laboratory, Mesilla Park, N.M.; and Agricultural Engineer, Agricultural Engineering Research Division, ARS, USDA, USDA Cotton Field Station, Shafter, Calif.

spindle moistening agents used were plain water and water plus a wetting agent at rates of two to eight gallons per bale, and a textile oil at rates of one to seven pints per bale. All cotton was ginned the same day as picked, except for that picked late in the day, which was held under cover until the following morning.

The ginning was done in a modern two-stand gin equipped with 24-shelf tower drier which was operated with inlet air temperatures between 190 and 205 degrees F. and unit saw-type lint cleaners, in addition to a moderate amount of overhead seed cotton cleaning.

Four randomized replications were harvested for each treatment. In 1955 each replication yielded approximately one-half bale while in 1956 each replication yielded about one-quarter bale.

Picker efficiency was based on clean seed cotton and was obtained by hand-gleaning 26 feet (.002 acre) at three different locations in each replication. Moisture content of the seed cotton on the plant was obtained by hand-picking three samples from each replication just before harvesting. Moisture content of the seed cotton after picking was obtained by taking three samples from the trailer for each replication immediately after being dumped by the picker. Trash content of the seed cotton was obtained from two samples per replication taken from the trailer, while that of the lint was obtained from a single sample per replication taken from the lint slide in the gin. Two one-pound samples per replication were taken from the lint slide for the grade classing and fiber analysis. Two 10-pound samples per treatment were taken from the lint slide for the spinning and dyeing tests.

Results

The results of the study are given in Tables 1 and 2. There was a reduction in picking efficiency with the textile oil, particularly with the low rates. The oil, however, did an excellent job in keeping the spindles clean.

There was no significant difference in picking efficiency between plain water and water plus a wetting agent, or between the various rates at which these materials were used. Both materials did a resonably good job of keeping the spindles clean, particularly with the high rates.

There was no correlation between the amount of water used and the increase in moisture of the seed cotton during picking. The maximum increase was about three percent with any of the rates. There was an increase of from one percent to two and one-half percent with the oil for which no explanation could be given.

Neither the kind nor quantity of moistening material had any effect on the trash content of either the seed cotton or the lint. There were no noticeable difference in the ginning of any of the cotton except that with the cotton containing textile oil, light blue smoke was emitted from the drier exhaust.

There were variations in the grades, but these could not be correlated with either the kind or quantity of moistening agent. This was true for both the grades based on lint trash only and on the composite grades. The lint trash grades were determined by the allowable trash percentage for the various grades in the mineograph publication, "Cotton Testing Service" put out by the Cotton Branch of the Production and Marketing Administration of the USDA in 1949. The composite grades were the grades as determined by the regular classers of the U.S. Cotton Classing Service in Bakersfield, Calif., based on trash, color, and preparation. The grade index is based on 94 for Strict Low Middling, 100 for Middling, and 104 for Strict Middling.

Lint samples for all treatments, except the one in which water was applied to the picker spindles at the rate of four gallons per bale in 1955, were processed into carded 22's and 50's yarns. Luster measurements were on the gray 22's and 50's and on the 50's yarns after being mercerized. Color measurements were made on the 22's yarn in the gray, after being dyed blue, and after bleaching gray yarns.

Partial results of these measurements are given in Tables 1 and 2. There were no statistically significant differences in any of the spinning and finishing measurements for 1955. There were significant differences due to treatment effects at the 95 percent confidence level in seven of the measurements in 1956. The practical importance of these differences is doubtful however, since they are near to or less than the standard error of the measurements involved. Yet when the treatments are put in rank from highest to lowest quality for each of these seven measurements, the overall best treatments are water plus wetting agent applied at the low rate, and plain water applied at the high rate. The poorest treatments are textile oil ap-

(Continued on Page 24)

Classified Advertising

RATES AND CLOSING DATES: Ten cents per word per insertion. Include your firm name and address in making word count. Minimum charge $2.00. Copy must be in our hands by Thursday morning of week of issue. Please write plainly.

Oil Mill Equipment for Sale

FOR SALE—Filter presses, screening tanks, single and twin motor Anderson Super Duo expellers, 141-saw linters, baling presses, car unloader, Bauer #199 seed cleaners, Bauer #153 and 403 separating units, bar and disc hullers, 72" and 85" stack cookers, 72" 4-hi stack cookers for French expellers with enclosed drive, 42" and 60" rolls, boilers, hydraulic press room equipment.—V. A. Lessor & Co., P. O. Box 108, Fort Worth, Texas.

INSPECTIONS and appraisal. Dismantle and installation.—Oscar V. Shults, Industrial Engineering, Phone BUtler 9-2172, P. O. Box 357, Grapevine, Texas.

FOR SALE—Anderson Duplex Super Duo 36" cooker twin motor expellers, 42" and 36" filter presses, oil refining equipment, oil screening tank, five-high cracking rolls, scale tanks complete with Toledo scales, Richardson scales, meal coolers, Prater pulverizers, pumps and motors. All in A-1 condition. Contact Lee Atherton of Archer Daniels Midland Co., Minneapolis, Minnesota.

OIL MILL EQUIPMENT FOR SALE — Rebuilt twin motor Anderson high speed expellers, French screw presses, stack cookers, meal coolers, four-teen inch conditioners, filter presses, oil screening tanks, complete modern prepressing or single press expeller mills.—Pittock & Associates, Glen Riddle, Pa.

FOR SALE—Anderson Super Duo expellers. Filter presses. D-K 90" 5-high all-steel cooker; 2 French 5-high 72" expeller cookers. Bauer 199—60" seed cleaner. Bauer 153 separating unit. Butters milling machine. Carver 176-saw Tru-line gummer. Carver double-drum hull beater. 141-saw Carver linters. Double-box linter press. Bar hullers. Attrition mills. 20" to 80" fans. Motors: 75 h.p. and under. Starting boxes and switches.—Sproles & Cook Machinery Co., 159 Howell St., Dallas, Texas. Telephone RI-7-5958.

Gin Equipment for Sale

FOR SALE—Complete cotton gin plants. Second hand and reconditioned gin machinery.—Sam Clements Company, Inc., Phones REgent 5-3656 and REgent 5-3764, West Memphis, Ark.

FOR SALE—Gin stands: 5-80 saw Murrays with glass fronts, 6" mote conveyor, new gin ribs and huller ribs. 4-80 saw double moting automatic Lummus. Lint cleaners: 5 Continentals with by-pass valves, Hartzell fans and motors. 5 Murray A.B.C.'s—like new. Feeders: 5-67" Continental 4-X. 4 Hardwicke-Etter 66" with 4-cylinder after-cleaners. 5-60" Super Mitchells Driers: One No. 18 Murray Big Reel. One Hardwicke-Etter 10-shelf tower drier with burner.—Kimbell Used Gin Machinery Co., Box 456, Earth, Texas.

FOR SALE—Cheap. Two electric motors, 40 and 75 h.p., 2200 and 2300 volts with controls. Two suction fans, 25 and 40. Ball bearing line shaft pulley bucket elevator, lint flue condenser. Four 1929 Munger air blast 70-saw gins with Mitchell feeders and belt distributor complete with belts for $600. Vacuum separator.—Gus Wolman, Caldwell, Texas.

FOR SALE—3-80 saw Continental direct connected model F3 brush gins, impact cleaner, 24-shelf tower drier, all-steel down packing press. Excellent condition. Also delinting equipment consisting of 3 delinters, seed cleaning, grading and elevating and treating equipment.—Swint Seed & Grain Co., Orchard Hill, Georgia. Phone Griffin 3843, Telegraph Griffin, Georgia.

FOR SALE—One complete 5-80 Lummus automatic gin machinery $7,500. Has been in operation in past years including 1957, in very good condition. For further details write Kollaja Gin Co., P. O. Box 273, Ganado, Texas.

FOR SALE—Complete 4-80 saw air blast Model C gins, all-steel up-packing paragon press, E.J. tramper, triplex pump base tank and cover, all Continental. Press alone worth the price of the outfit—$7,500.—James C. Mann, phone 2267, Covington, Ga.

FOR SALE—Real bargains in gins to move or operate where now located. Contact me via telephone TE 5-8555 or P. O. Box 7385, Corpus Christi, Texas. M. M. PHILLIPS.

SPECIAL BARGAINS—All steel double box up-packing Hardwicke-Etter press. Four 9" rotor lifts, like new. Late model 4-90 Mitchell conveyor distributor. Steel cleaners: 6-cylinder Stacy, 7-cylinder 50" Hardwicke-Etter V-belt driven, 4-cylinder Continental, one Mitchell Jembo, 8' Lummus 4-cylinder after cleaner, 5-cylinder and 7-cylinder 50" blow-in type Gulletts. Five Murray saw type lint cleaners and four 1949 model Continental lint cleaners. Mitchell convertible and Super units in 60" and 66" lengths. Two trough Continental and Murray Big Reel driers. New tower driers in any size. 10' and 14' Lummus and one 14' Gullett late model steel bur machines. Late model fully enclosed medium stroke Murray steel tramper. 48" type M and type C Lummus, 50" and 70" Hardwicke-Etter and two 52" Murray VS steel separators. New and used single and double fans, belting, conveyor trough and a general line of transmission equipment. For your largest, oldest and most reliable source of used and reconditioned gin machinery, contact us. Call us regarding any machinery or complete gin plants which you have for sale or trade.—R. B. Strickland & Co., 15-A Hackberry St., Phones: Day PL-2-8141, Night: PL-3-7929, Waco, Texas.

FOR SALE—Two 24-shelf Murray driers, one with magnet. One set Murray lint cleaners for 4-90, saw type complete. This machinery installed new in 1952, excellent condition.—Farmers Co-operative Marketing Assn., Box 873, Edna, Texas.

FOR SALE—One complete 5-80 Lummus automatic gin, '49 model, excellent condition, with 24-shelf tower drier, diesel power, all-steel, including press. Will sell all or separate.—West Portland Coop Gin, Taft, Texas. Phone 904-K13.

FOR SALE—4-90 Continental, electric, steel, irrigation, possession, $165,000, $60,000 cash, owner carry balance. 3,000 bales yet to gin. 5-80 Continental F3, electric, steel, irrigation, possession, $160,000, $30,000 cash. 1,100-acre farm, 4 wells, good cotton and wheat allotment, to trade for gin. Culligan soft water plant for sale, franchise two counties, $31,000, doing good business.—W. T. Raybon, Phone Porter 2-1605, Box 41, Lubbock, Texas.

Equipment Wanted

WANTED—Delinting machinery, if possible complete plant with condensers, flue system, intake and discharge chutes, pipings, Tru-line gummer, stick and green leaf cleaner (Hinckley or Stacy), etc. Prompt delivery, or if still in operation, February after seasonal work. State lowest price, year of make, mechanical condition, etc.—Box DB, The Cotton Gin and Oil Mill Press, P. O. Box 7985, Dallas 26, Texas.

California Chooses Blonde Maid of Cotton

CALIFORNIA'S CHOICE for Maid of Cotton is Janice Brown of Fresno, shown here with Harry Baker, also of Fresno, cotton and civic leader. Janice has already made a plane tour of the state in behalf of cotton, accompanied by Mrs. Richard Tipton, tour director; Mrs. John Tourtillot, publicist; and Jerry Coigny, pilot. She returned to Fresno Nov. 25 for a coffee hour and fashion show, arranged by the Fresno Cotton Wives Auxiliary and members of the industry.

WANTED—Complete cotton gin plants and used gin machinery.—Sam Clements Company, Inc., West Memphis, Arkansas.

Personnel Ads

EXPERIENCED GINNER and repairman available. Go anywhere. Our season here is over. Have own tools—carpenter, painting and pipefitting, etc. References. Write to P. O. Box 138, Munford, Tennessee.

Power Units and Miscellaneous

FOR THE LARGEST STOCK of good, clean used gas or diesel engines in Texas, always see Stewart & Stevenson Services first. Contact your nearest branch.

SEE US for good used re-built engines, MM parts, belt lace, and Seal-Skin belt dressing.—Fort Worth Machinery Company, (Rear) 913 East Berry Street, Fort Worth, Texas.

FOR SALE—671 G.M.C. diesel engine, run only 3500 hrs. for $2,000.—C. E. Boyd, phone HI 2-3944, Rt. 2, Box 645, Austin 4, Texas.

FOR SALE—One 300 h.p., 700 RPM, 440 volt, 60 cycle, 3 phase, slipring electric motor in excellent condition.—R. W. Kimbell, Box 456, Earth, Texas.

USDA Changes Schedule For CCC Cotton Sales

USDA has announced the following new schedules of dates for receiving offers for CCC cotton:

Offers under Announcement Number NO-C-5, which covers sale of CCC's stocks of upland cotton for unrestricted use, will be opened at 4:45 p.m., Central Standard Time, on Monday Dec. 16, Jan. 6, Jan. 27, Feb. 17, and thereafter every other week on Monday.

Offers under Announcement Number NO-C-9, which covers the sale of CCC's stocks of upland cotton for export under the Cotton Export Program during the 1957-58 marketing year, will be opened at 3:45 p.m., CST, on Tuesday, Dec. 3, Dec. 24, Jan. 14, Feb. 4, Feb. 18, and thereafter every Tuesday.

Cotton and Synthetic-Silk Associations Consolidate

American Cotton Manufacturers' Institute and National Federation of Textiles will consolidate May 1, 1958, the cotton and silk-synthetic organizations have announced.

National Federation of Textiles will be dissolved and a Man-Made Fiber and Silk Division of ACMI will operate in the present NFT offices, 389 Fifth Avenue, New York. ACMI's New York office, directed by John W. Murray, will operate in conjunction with the other division.

Rice Hulls Increase Yield

Rice hulls, packed into narrow trenches in an alfalfa field, have increased yields in California tests. Better water penetration caused the increase, the University of California, Davis, reports.

Researchers think that it might be more practical to use residues of material grown on the field, rather than to haul in the hulls. This suggests the possibility of using cotton burs. California testers packed hulls into trenches 20 inches deep and five feet apart.

■ **TOM J. BASS, Red Oak, N.C., is the fourth generation of his family to operate a gin there.**

For Cottonseed Meal

Ad Gets Results Fast — Then What?

Cottonseed meal advertising of the National Cottonseed Products Association got fast results recently—so fast that the buyer didn't know what to do with the meal after he got it!

A feeder at Carbondale, Ill., wrote NCPA's Research and Educational Division in Dallas: "I bought some cottonseed meal as soon as I read your ad today. But I do not know how to feed it."

The stockman explained that he had steers to fatten, and Garlon A. Harper of NCPA promptly sent him feeding information.

Coggy Bullock Dies, Made Cotton Jewelry

Coggy Bullock, the Shelby, Miss., maker of unusual cotton jewelry, died of a heart attack, Nov. 15 at his home.

He was widely known throughout the cotton states for his jewelry and dolls carved from pecans, acorns and adorned with cotton. Although handicapped by arthritis which left him with only limited use of his arms and hands, his cheerfulness and determination to lead a normal life were an inspiration.

■ **J. B. AETON, Callison, S.C., ginner for SAM METTS, has never lost a day from work during 23 ginning seasons.**

India Grows More Peanuts But Sesame Reduced

Peanut acreage in India is 10 percent above last season's, the first official estimate indicates. Sesame plantings, however, are reported as five percent reduced from 1956.

Gossypol Research Planned

Bassic research on gossypol in cottonseed oil and meal will be done at the University of Tennessee under contract with USDA. Dr. V. L. Frampton, Southern Utilization Research and Development Division, New Orleans, will supervise the work for USDA; and Dr. David A. Shirley will direct the studies in Tennessee.

■ **ED LIPSCOMB, Memphis, has received the Distinguished Service Citation of the Public Relations Society of America. He is a past president of the Society and is public relations director of the National Cotton Council. He received the award for his chairmanship of the public relations committee of President Eisenhower's People-to-People Program to promote international goodwill.**

Spindle Moistening Agents

(Continued from Page 21)

plied at the high rate followed by textile oil applied at the low rate.

Yarns from the 1955 treatments using textile oil and the one using water plus wetting agent applied at the rate of eight gallons per bale were woven into fabrics. Samples of these fabrics were dyed and their color measured. No significant differences in either fabric color or appearances were found. Samples of the unbleached and undyed fabrics were examined using an ultraviolet light with maximum radiation in the 3660 Angstrom range, and no differences that could be attributed to the picker treatments were found. Samples of lint from all the 1955 treatments were similarly examined with similar results. No fabrics were woven in 1956.

The results of the measurements made on the fiber, spinning, and finishing properties of the lint from the picker treatments indicated no quality change in 1955. However, the 1956 tests show a slight trend towards a different dyeing quality for those treatments in which high rates of textile oil were used. Seed cotton drying was used at the gin on all treatments and possibly removed an appreciable amount of the textile oil applied to the lint by the picker spindles. The annalysis of classer's grades and picker performance indicate that textile oil, plain water or water plus a wetting agent can be used without seriously affecting the grade of the cotton, but that oil reduces the efficiency of the mechanical picker, especially at low rates of application.

Acknowledgement

The authors wish to express appreciation to Harold S. Stanton, formerly agricultural engineer, U.S. Cotton Field Station, Shafter, Calif., under whom the 1955 work was initiated and to the staff and field force of the Shafter Station for their combined efforts which made these experiments possible.

Color Measurements Routine

(Continued from Page 16)

in color, at the same time that the foliage becomes drier and increasingly brittle. More leaf and trash gets through the ginning process in cottons that are picked late.

Cotton from bolls opening after frost may be Spotted, Tinged, or Yellow Stained, and when such cotton is picked and ginned with cotton from bolls that have opened normally before frost, Spotted cotton may result. Spots are also caused by insects, and in localities of red soil, low hanging bolls may become land stained. Thus cotton, as it is marketed by the bale in the raw state, is far from being all white, as many of the general public often suppose.

At present there are 24 grades for Upland cotton in effect, represented in physical form by boxes of standards, and 13 descriptive, as listed in the accompanying table.

As for storage, it has been found that the normal yellowish color of cotton increases with age, that there is more increase in the higher grades than in the lower grade, and more increase in Spotted or Tinged cottons than in Gray cottons. Thus, the color in standard boxes stored or used under different conditions, may differ considerably as time goes on.

Because of this natural change, it is necessary to take precautions in preparing copies of the standards to keep the color at a level within the range of the original standards at the time they were established. Cottons kept in cool and dry storage will not change as fast as similar cottons kept in a hot and humid storage.

Color measurements, made in a "refrigeration test" now under way on a series of standards held at different conditions of humidity and temperature, show that even within one year's time the color may change significantly in storage. Three paired sets of 1956 standards, held for one year at 50, 70, and 100 degrees F., with one of each set at 50 percent relative humidity, the other at 85 to 90 percent relative humidity, show significantly greater changes for samples under increasingly higher temperatures. At each level of temperature the samples stored under the high humidity changed very much more than those held at lower levels of humidity.

To help prepare the standards uniformly, the instrument is directly used in selecting and purchasing bales for use in the grade standards, and in measuring each of the 1,000 or more samples that usually can be prepared from each of the bales used in the standards.

Information obtained by use of the instrument in studies, such as those already mentioned, is used to help *keep* the standards uniform, at least until they are shipped out of the USDA laboratories where they are prepared. A start was made after the 1956 International Grade Standards Conference by storing duplicate sets, approved at the conference, in a room in which preliminary controls were established for temperature and humidity.

In 1956 the signatories to the Conference drew, by lot, the set numbers for one set of standards to be shipped immeediately following the 1956 conference, another to be shipped in the spring of 1957, and a third set to shipped in the spring of 1958. Storage conditions for such widely separated cities as Liverpool, Milan, and Bombay, may differ considerably, therefore the change in color during storage also differs considerably. In the one-year period, 1956-57, the first Bombay set is reported to have changed very much in comparison to the set shipped in 1957. Yet they were identical when passed by the delegates to the Conference in 1956!

These are but a few examples of the way color measurements are being used to help the cause of agriculture in the U.S.

Official Standards for Grades of Upland Cotton.

Gray	White	Spotted	Tinged	Yellow Stained
GM Gray	Good Middling [1]*	GM Sp*	GM Tg	GM YS
SM Gray	Strict Middling [1]*	SM Sp*	SM Tg	SM YS
M Gray	Middling [1]*	M Sp	M Tg	M YS
SLM Gray	Strict Low Middling [1]*	SLM Sp	SLM Tg	
	Low Middling [1]*	LM Sp	LM Tg	
	Strict Good Ordinary [1]			
	Good Ordinary [1]			

[1] These grades are prepared for public distribution in practical forms or grade boxes. The other grades are descriptive, and are not represented by grade boxes. The grades shown with asterisk are deliverable on futures contracts. Those without asterisk are not deliverable on such contracts.

Oil Mill Superintendents Set Memphis Meeting

The only regional meeting of the year for the Tri-States Oil Mill Superintendents Association will be held Dec. 7, at the Hotel King Cotton in Memphis, according to Association President E. A. Gaulding, Buckeye Cellulose Corp., Jackson, Miss.

O. D. Easley, Wesson Oil-Snowdrift, Memphis, and Association secretary-treasurer, is assisting with arrangements for the meeting which will open at 2 p.m.

Among the features of the program will be an address "Lint Quality and the Effect on the Finished Product," by Frank Shults, Buckeye Cellulose Corp., Memphis. Earl Hassler, Buckeye, Memphis, who is serving as program chairman, has arranged a panel discussion—"1957's High Moisture and Fatty Acid Seed," in which all attending superintendents will be asked to join. B. C. Lundy, Greenville Oil Works, Greenville, Miss., 1958 convention chairman, will present a report on the 1958 convention, to be held June 4-5-6, in Biloxi, Miss.

Mrs. C. H. Caldwell, president of the Women's Auxiliary to the Tri-States Oil Mill Superintendents Association, has announced that the annual Christmas luncheon of the Auxiliary will be held Dec. 7 for the convenience of out-of-town members. The luncheon is scheduled for 12:15 p.m. in Hotel Peabody, with Mrs. E. E. Kressenberg, program chairman.

A banquet at 7 p.m. in Hotel King Cotton, will officially close the meeting.

Article Praises Gins

Gin trash inspections for the pink bollworm in California's San Joaquin were the subject of an article recently in the Fresno Bee.

Sixty-three gins in Fresno County are giving full cooperation to the program, the article pointed out.

■ **GEORGE G. CHANCE, Bryan, Texas, president, National Cotton Council, visited The Cotton Gin and Oil Mill Press offices Nov. 18.**

New Booklet

"WHICH WAY FOR COTTON" DISCUSSES PLAN

"Which Way for Cotton" is the title of a new booklet prepared by George W. Pfeiffenberger, executive vice-president, Plains Cotton Growers, Inc., Lubbock.

Twenty-five thousand copies of the publication are being distributed.

Illustrated with charts and graphs, the publication reviews the cotton problem and the objectives of the legislation which it proposes. The plan, popularly known as the American Cotton Producer Associates program, has the following advantages, Pfeiffenberger points out in his summary:

"Any program adopted for cotton must offer benefits to the entire cotton industry and to the nation if it is to succeed. The increased acreage provided for will allow the farmer to produce at lower unit cost, which in turn will make cotton more competitive at the mill door.

"The provisions of the plan will permit producers, ginners, cotton buyers and merchants, compresses and warehouses, and cottonseed crushers to operate with expanding volume, which is the basis for efficient and profitable operations. It will permit cotton mills to procure raw cotton at a competitive price with synthetics and foreign production, which will enable them to compete more favorably, and to increase consumption of cotton goods through lower prices. It will put cotton back into its traditional marketing channels, allow the cotton exchanges to perform their

GEORGE W. PFEIFFENBERGER

normal functions, and give real impetus to private enterprise.

"Such a program as this will be less costly to the government and easier to administer. Whereas the export subsidy plus storage, handling and loss on quality, along with Soil Bank payments and loss on textile export subsidy program costs approximately $529 million, the total cost of marketing equalization payments, and Soil Bank option with no textile export subsidy would cost the government only $424 million for 1958. This would be reduced to about $368 million for 1959 with reduction in payments due to expanded consumption, and no need for the Soil Bank.

"Such a program, which offers aid to each segment of the vast cotton industry, could again make the U.S. cotton industry a healthy and expanding one."

Retired Cotton Gin Owner, Jack Carter, Dies

Jack R. Carter, retired cotton gin owner, died of a heart attack Nov. 15, at his home in Memphis. He was 58.

Born in Atwood, Tenn., he lived from 1920 to 1942 in Memphis, where for several years he was a seed buyer for Chickasaw Oil Mill. After living 15 years in Dyersburg, Tenn., where he owned and operated two cotton gins, he returned to Memphis.

In addition to his wife he leaves three brothers, M. O. Carter of Memphis, Charles W. Carter and Henry Carter of Nashville, four sisters, Mrs. Clyde Rice and Mrs. Thomas Finlay of Nashville, and Mrs. J. L. Hall and Mrs. R. R. Johnson of Washington.

■ **ROBERT PATTERSON, Trenton, Tenn., has been named chairman of the Valley Oilseed Processors' Association research committee, succeeding RALPH WOODRUFF, Wilson, Ark. LAWRENCE HODGES, Memphis, is program committee chairman, succeeding ALLEN SMITH, Memphis.**

CALENDAR

Conventions - Meetings - Events

12	13	14	15	16	17	18

• Dec. 7 — Tri-States Oil Mill Superintendents' Association regional meeting. Memphis. W. E. Hassler, Buckeye Cellulose Corp., Memphis, chairman.

• Dec. 12-13 — Beltwide Cotton Production Conference. Peabody Hotel, Memphis. For information, write National Cotton Council, P. O. Box 9905, Memphis.

1958

• Jan. 13-14—National Cotton Council annual meeting. Westward Ho Hotel, Pheonix, Ariz. For information, write Council headquarters, P.O. Box 9905, Memphis.

• Jan. 21—Cooperative Ginners' Association of Oklahoma annual convention. American Legion Building, Hobart. Mrs. Lucile Millwee, P. O. Box 631, Carnegie, secretary-treasurer.

• Feb. 3-4—Cottonseed Processing Clinic. Southern Regional Laboratory, New Orleans. Sponsored by USDA and Valley Oilseed Processors' Association. C. E. Garner, 416 Exchange Building, Memphis, Association secretary.

• Feb. 10-11—Annual joint convention, Texas Cooperative Ginners' Association, Texas Federation of Cooperatives and Houston Bank for Cooperatives. Baker Hotel, Dallas. For information, write Bruno E. Schroeder, 307 Nash Building, Austin.

• Feb. 10-11 — Southeastern Gin Suppliers' Exhibit. Biltmore Hotel, Atlanta. For exhibit information, write Tom Murray, 714 Henry Grady Building, Atlanta. Concurrent with joint meeting of Alabama-Florida, Carolinas and Georgia Cotton Ginners' Associations.

• Feb. 10-11 — Joint convention, Alabama-Florida, Carolinas and Georgia Cotton Ginners' Associations. Biltmore Hotel, Atlanta. Tom Murray, 714 Henry Grady Building, Atlanta, executive vice-president, Alabama-Florida and Georgia Associations. E. O. McMahan, Bennettsville, S.C., executive secretary, Carolinas Ginners' Association. Meeting concurrent with Southeastern Gin Suppliers' Exhibit.

• Feb. 12-14—Cotton Research Clinic. Pinehurst, N.C. For information, write the National Cotton Council, P. O. Box 9905, Memphis 12.

• Feb. 27-28—Oklahoma Cotton Ginners' Association annual convention. Skirvin Hotel, Oklahoma City. Edgar L. McVicker, 307 Bettes Building, Oklahoma City, secretary-treasurer

• March 4-5—Western Cotton Production Conference. Hotel Cortez, El Paso, Texas. Sponsored by Five-State Cotton Growers' Association and National Cotton Council.

• March 7-9—West Coast Division, International Oil Mill Superintendents' Association. Lafayette Hotel, Long Beach, Calif.

• March 10-12 — Midsouth Gin Supply Exhibit. Midsouth Fairgrounds, Memphis. Sponsored by Arkansas-Missouri Ginners' Association, Tennessee Ginners' Association and Louisiana-Mississippi Ginners' Association, which will have annual meetings in conjunction with Exhibit. For information on exhibit, write W. Kemper Bruton, P. O. Box 345, Blytheville, Ark.

• March 10-12 — Joint convention, Arkansas-Missouri, Tennessee and Louisiana-Mississippi Ginners' Associations. Memphis, Tenn. Held in conjunction with Midsouth Gin Supply Exhibit. W. Kemper Bruton, Blytheville, Ark., executive for Arkansas-Missouri Association; Gordon W. Marks, Jackson, Miss., executive for Louisiana-Mississippi Association; and W. T. Pigott, Milan, Tenn., executive for Tennessee Association.

• April 10-11 — Cotton Merchandising Research Clinic. Commodore Perry Hotel, Austin, Texas. For information write Joel F. Hembree, P. O. Box 8020, University Station, Austin.

• April 13-15 — Texas Cotton Ginners' Association annual convention. State Fair of Texas grounds, Dallas. Edward H. Bush, executive vice-president, Dallas. For exhibit information, write Edward H. Bush, president, Gin Machinery and Supply Association, P. O. Box 7665, Dallas 26.

• April 13—National Cotton Ginners' Association annual meeting, Dallas Texas. Tom Murray, 714 Henry Grady Building, Atlanta, executive secretary.

• April 14-15—Valley Oilseed Processors' annual convention. Buena Vista Hotel, Biloxi, Miss. C. E. Garner, 416 Exchange Building, Memphis, secretary.

• April 21-23—American Oil Chemists' Society spring meeting. Memphis. For

information, write AOCS headquarters, 35 East Wacker Drive, Chicago.

• May 5-6—National Cottonseed Products Association annual convention. Atlanta Biltmore Hotel, Atlanta. John F. Moloney, 19 South Cleveland, Memphis, secretary-treasurer.

• May 19-20 — Oklahoma Cottonseed Crushers' Association annual convention. Quartz Mountain Lodge, Lake Altus. Edgar L. McVicker, 307 Bettes Building, Oklahoma City, secretary.

• June 1-3—Texas Cottonseed Crushers' Association annual convention. Hotel Galvez, Galveston. Jack Whetstone, 624 Wilson Bldg., Dallas, secretary-treasurer.

• June 4-6—Tri-States Oil Mill Superintendents' Association annual convention. Edgewater Gulf Hotel, Edgewater Park, Miss. B. C. Lundy, Greenville, Miss., and Woodson Campbell, Hollandale, Miss., co-chairmen.

• June 5-7—American Cotton Congress at Harlingen, Texas, and Matamoros, Mexico. For hotel or motel reservation write: Harry Nunn, Madison Hotel, Harlingen. For general information write to Burris C. Jackson, Hillsboro, Texas.

• June 8-10—International Oil Mill Superintendents' Association annual convention. Baker Hotel, Dallas. H. E. Wilson, P. O. Box 1180, Wharton, Texas, secretary-treasurer.

• June 23-24—Joint convention, North Carolina, South Carolina and Southeastern Cottonseed Crushers' Associations. Ocean Forest Hotel, Myrtle Beach, S.C. For information, write Mrs. M. U. Hogue, 612 Lawyers' Building, Raleigh, N.C.; C. M. Scales, 318 Grande Theatre Building, Atlanta; or Mrs. Durrett L. Williams, 609 Palmetto Bldg., Columbia, S.C.

• Aug. 12-14—Beltwide Cotton Mechanization Conference. Memorial Center, Brownsville, Texas. For information, write National Cotton Council, P. O. Box 9905, Memphis, Tenn.

• Oct. 20-22—American Oil Chemists' Society fall meeting. Chicago. For information, write AOCS headquarters, 35 East Wacker Drive, Chicago.

Tennessee Council Will Meet Dec. 6 at Chisca

Congressional leaders associated with cotton legislation will address the Tennessee Agricultural Council Dec. 6. The meeting is at the Chisca Hotel in Memphis.

Speakers will include Senators Stuart Symington of Missouri and Estes Kefauver of Tennessee, and Representatives W. R. Poage of Texas and Jere Cooper of Tennessee.

G. F. Parker, Tiptonville, Tenn., is president of the Council.

Subsoiling Hikes Yield

Subsoiling increased cotton yields for Cecil Johnson, Clarendon, Ark.

Subsoiled land could be cultivated earlier and stored more water in the soil. Fewer irrigations were needed, he reported.

■ J. D. FLEMING, Memphis, executive vice-president, National Cottonseed Products Association, has sent information on the Soil Bank situation and cotton acreage allotments to agricultural workers of the Cotton Belt.

Cotton's Postmark

(Continued from Page 8)

securing better stands of cotton and other crops on heavy clay soils.

The real objective of the mechanization research is to find ways to help the farmer deliver to the gin a high-quality product with the least possible hand labor and at the lowest possible cost. Obviously, machine harvest is an important feature of this entire program. A great deal of the time and effort of the research engineers is directed toward improving machine harvesting. Interestingly enough, some of the problems associated with harvesting have their origin in seedbed preparation.

Excellent cooperation exists between the engineering staff and farm machinery manufacturers. The farmer has been the beneficiary, as this fine working relationship has resulted in improvements in farm machinery.

Weed control research at Stoneville includes work with all crops being grown in the area. Chemical as well as mechanical methods for controlling weed pests are being investigated. Some of the perennial weeds, such as Johnsongrass, redvine, and trumpet creeper, are difficult to control in growing crops. Fundamental studies are under way to learn more about the growth, development, and dissemination of these pests in order to find a point of attack.

A carefully planned program for testing the disappearance and accumulation of herbicides in the soil was instituted several years ago. The system involves very small field plots where applications of chemicals are made to simulate two, four, six, and eight years of use. Cotton, corn, soybeans, and oats are used as test crops in the field, and soil samples are taken to determine the rate of disappearance of the chemical by bio-assay.

An economic evaluation of weed-control practices, and combinations of practices, in cotton has been made on a field scale during the past five years. This is a cooperative project involving the Departments of Farm Management, Weed Control, and Mechanization.

Entomologists working with cotton insects recognized early the great possibilities of the chlorinated hydrocarbons in controlling cotton pests. Favorable results with low-gallonage sprays promoted the use of materials applied in this manner.

Today, the entomology program is designed to examine some of the more basic aspects of insect control as well as to continue the screening of promising insecticides. A new insect laboratory, greenhouse, and insectary are being built at the present time. These facilities will provide controlled conditions to supplement the existing field-plot areas.

The cotton-physiology studies at the Delta Station began with the practice of defoliation. Experiments with defoliants have determined the method of application, time of application, plant condition when defoliation can be expected to succeed, and most effective materials. Throughout these experiments, constant checks have been made to detect any influence on fiber properties.

Early this year the results of a three-year study on the economics of defoliation were published. This research was conducted on plantations over a wide area in the Delta. Large acreages were involved, and the cotton was followed from the field through the gin. Here

the rather unusual combination of plant physiologists and economists cooperated to find some answers and to point out areas where present knowledge is deficient.

With added facilities and personnel, the physiology program has been expanded to include work on boll drop and the response of cotton seedlings to low temperatures. Preliminary results show great promise for advances in cotton production.

To be worthy of recommendation, a production practice must reduce costs, reduce labor requirements, or produce a higher quality product which will return more profit to the farmer. Management and cost studies at the Delta Station are designed to evaluate practices and combinations of practices under field conditions. These investigations have served as guides to sound farm management and have made invaluable contributions toward helping shape the research program.

The defoliation and weed-control cost studies mentioned earlier are examples of research in the field of management and costs. Similar evaluations are under way on supplemental irrigation and livestock production in the Delta.

Soil-fertility experiments have always been a part of the station's research program. Results of early tests showed the need for nitrogenous fertilizers in maintaining crop yields. These early tests also demonstrated that most soils in the Delta are well supplied with phosphorous and potash. Accumulated data from fertility plots on many locations in the area have shown that approximately 12 percent of the cultivated land is deficient in either phosphorous, potash, or both elements. Experiments are now being conducted to help calibrate soil tests in the laboratory in order to define the areas of deficiencies.

The value of winter legumes in crop production has been carefully evaluated. In plots maintained for 30 years, winter legumes have been compared with commercial nitrogenous fertilizer for cotton production. Detailed analyses of the physical and chemical properties of soils in these plots and crop yields have shown that the only value of the legumes is the nitrogen they supply.

Early work with anhydrous ammonia at the Delta Station promoted the use of this material. Farmers from the Mid-south and other sections flocked to the station to gain information on the use of this cheap source of nitrogen.

Work with anhydrous ammonia and other materials has continued to determine accumulation and loss of nitrogen in different soils. Field and laboratory studies are in progress on nitrogen relationships on heavy clay soils which are expected to solve some fertility problems.

Irrigation, crop rotations (including sod), and deep tillage experiments are part of the soils program. Conscious of practical problems associated with soil losses and plant-soil-water relationships, this research is looking to the future.

• **Much Other Research** — Other areas of research at the Delta Branch Experiment Station include corn and small grains, forage crop diseases, horticulture, livestock, livestock insect control, forage and pasture crops, sesame and castorbeans, soybeans, and forestry.

Space does not permit a detailed account of the work in these departments.

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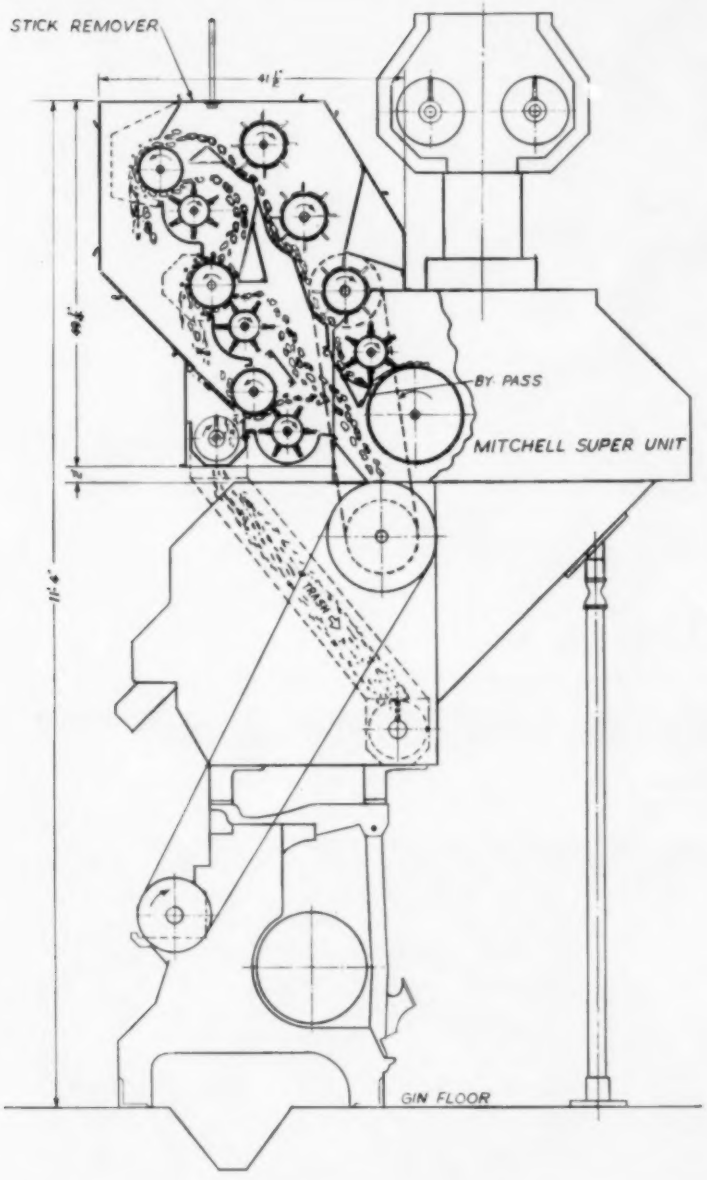

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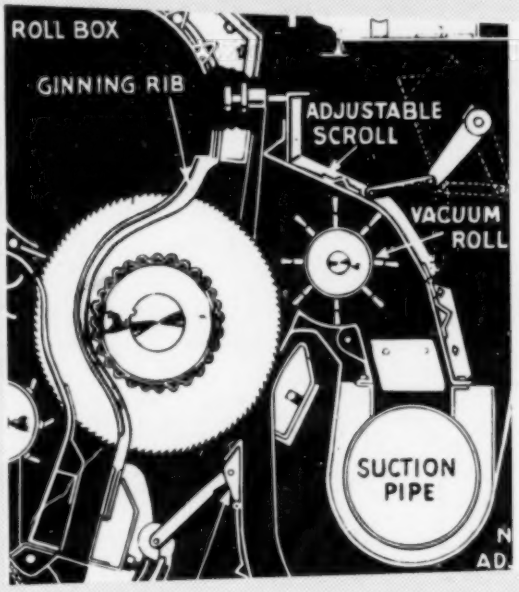

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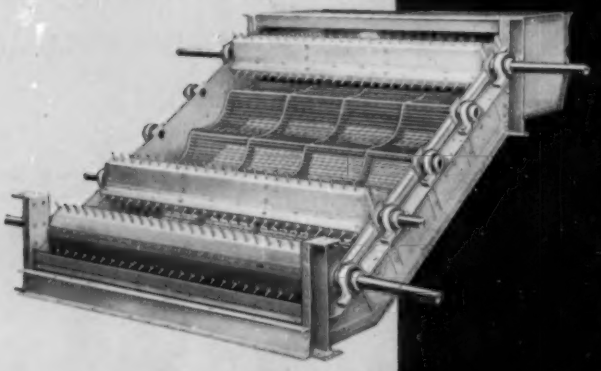

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